The American Artisan
And Hardware Record

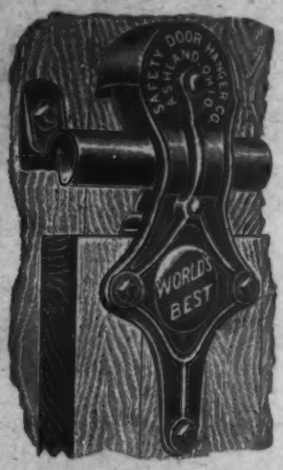
Vol. 53. No. 18. CHICAGO, MAY 4, 1907. $2.00 Per Year.

All Kinds of
BOLTS, RIVETS, NUTS, WASHERS, CARRIAGE FORGINGS, ETC.
Send for Catalog. Prices on Application
Manufactured by
COLUMBUS BOLT WORKS
COLUMBUS, OHIO

IN THE FRONT RANK FOR 25 YEARS
"AMERICAN SEAL"
ELASTIC OIL ROOFING CEMENT
STOVE PUTTY and ASBESTOS
FURNACE CEMENT
and the superior quality of these goods is still universally recognized.
THE WM. CONNORS PAINT MFG. COMPANY
MAKERS
TROY, N. Y.
Western Agent
PERKINS ROOFING & SUPPLY CO.
235 Lake St., Chicago, Ill.
Southwestern Agent
STOCKHOFF SUPPLY COMPANY
107 N. Main St., St. Louis, Mo.

TRYING to do business without advertising is like winking at a girl in the dark: you know what you are doing but nobody else does.

NEW DESIGN WORLD'S BEST TUBULAR TRACK DOOR HANGER



We have increased the diameter of the wheel to 2¾ in., making it the easiest running Hanger on the market.
The supplementary wheel prevents derailment. Frame is made of best grade malleable iron. Finished in Aluminum and each pair packed in an individual box, complete with bolts. The track brackets are slidable and may be placed at any point desired. We do not sell catalog houses. Write for prices.
SAFETY DOOR HANGER CO.
Manufacturers
Ashland, Ohio Hamilton, Ont., Can.

U. S. CLOTHES PINS

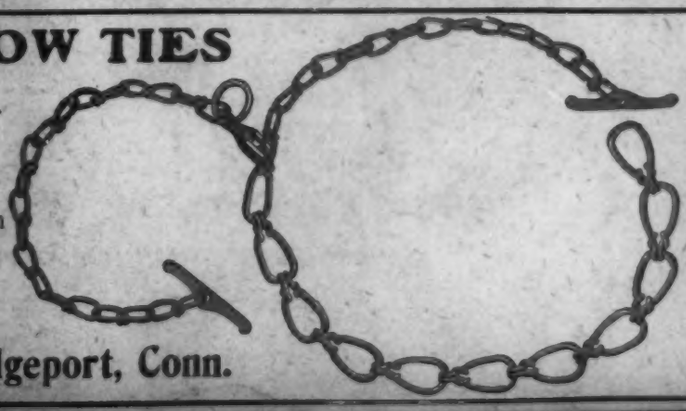
Never rust, smut, split, or blow off the line.

Any special clips made to order.

U. S. CLOTHES PIN COMPANY
Montpelier, Vt., U. S. A.

DELTA FILES DELTA FILES
FILES OF QUALITY
DELTA FILES
TRADE MARK DELTA
Lest You Forget—We Say It Yet
DELTA FILES
CARVER FILE CO., - Philadelphia, Pa.
An independent organization not connected with the trust in any form, shape or manner.

BROWN WELDLESS COW TIES
Twice as strong as welded chain.
A sample (full length) delivered for **ONE CENT.**
Any Retail Dealer sending postal card request with name of Jobber secures sample prepaid.
Sole Manufacturers
The BRIDGEPORT CHAIN CO., Bridgeport, Conn.



A FEW FACTS

Loose or Pith Hearth; Duplex or Basket Grates; Tile or Cast Linings.
7", 8" and 9" tops; 16", 18" and 20" ovens.
Made with Water Front, Reservoir, Steel High Closet, two styles of high shelves.

We are now making a perfectly plain range; we call it

CLASSIC CINDERELLA

Made with thermometer. Same general description as above.

We make several lines of Plain Ranges. It is their artistic appearance that first attracts the buyer. But it is the perfection found by a detailed examination of the goods that Seals the Bargain.

Our stoves are all cast from a Special Mixture of High Grades of Pig Iron, and are finished with extreme care.

There is nowhere else in the whole world that the mixing of metals is as thoroughly understood as in Pittsburg. That is why Pittsburg's Steel Rails wear well, her bridges are strong, her Armor Plate invulnerable, and her STOVES the MOST DURABLE.

We are located at the "Fountain Head" of Raw Materials for our use. We save the freight. This advantage enables us to give greater value for a dollar than is possible under any other circumstances. Put us to the test.

Stove and Range Co. of Pittsburg, PITTSBURG, PENNA.

KELSEY HEATED HOUSE

COUNTRY HOMES

The heating of this class of residences presents a difficult problem, and warm air, up until a few years ago, was generally condemned, because with the ordinary furnace, it was impossible to heat all the rooms to an even temperature.

A few years ago the first KELSEY Warm Air Generator was installed in one of these large residences,—and the results since has been that the KELSEY is today being installed in the largest country homes on Long Island, regardless of location or exposure.

In other words, the KELSEY System has demonstrated that every part of the building can be uniformly heated,—with pure fresh air; and the KELSEY has gained for itself a valuable reputation in this class of heating.

What is being done elsewhere YOU can do in your own locality.

Surely, if the KELSEY will so satisfactorily heat these larger residences in such exposed locations,—don't you think it will heat, just as satisfactorily, the residences in your vicinity?

WE WANT TO SEND YOU OUR AGENCY PROPOSITION!

KELSEY HEATING CO., SYRACUSE, N. Y.

New York City:
156 Fifth Avenue

VAN EVERA & LEWIS MFG. CO.
104-106 West Lake St., Chicago

JAMES SMART MFG. CO., Brockville, Ont., Sole Makers for Canada

BOYNTON'S

THE BOYNTON FURNACE CO.
BOYNTON'S PATENTED SQUARE POT
NEW YORK — CHICAGO

SQUARE POT

FURNACES

INTRODUCTION

AFTER Some Years' Experience in manufacturing and marketing the Admiral Furnace, with its square ash pit and grate, during which time several thousands of these furnaces have been installed and proved unprecedentedly successful, we have been led to modify, with two exceptions, the construction of our entire line of furnaces.

We Now Present to the Public a line of warm air furnaces which combine novelty and originality of design with a degree of ease and economy in operation which make them superior to any other line of furnaces in the world.

The Ash Pits Being Square, grate bars of equal length and motion and corners of fire pot perpendicular, ashes cannot accumulate above the grates at the sides of the pot, nor under the center of the grates, neither will the grate bars warp nor burn out in ordinary use.

The Upper Portion of the Fire Pot, being circular, and the bottom square, the effective grate area is 25 per cent more, and the effective radiating surface of the fire pot 10 per cent to 15 per cent more than in any other furnace made of equal diameter of fire pot.

With the Advent of this Form of combustion the poker has become obsolete—no prodding the fire through the feed door is necessary. **A** slight agitation of the shaker removes the ashes on the grate at the sides as perfectly as at the center.

An Ordinary Coal Scoop will remove all ashes from the square ash pit.

Each Grate Bar is Supported by an independent hanger, and any one of them can be removed and replaced in position when there is a fire in the furnace without disturbing any of the other bars.

The Corrugations of the Fire Pot provide for even expansion in heavy firing, and reduces the possibility of a fracture to the minimum.

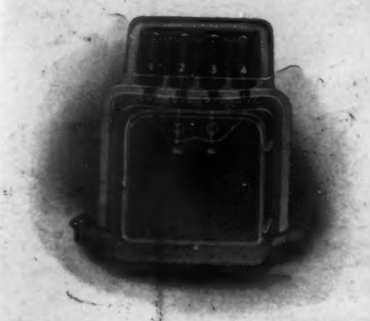
The Casings are of Such Size and form in their relation to the heating surfaces that the cold air admitted is thoroughly heated, and its passage over these surfaces such as to make available the maximum percentage of heat generated from the fuel.

Large Combustion Chambers, the extension of effective radiating surface, larger revertible flues in the radiators, ample warm air passages, double size feed doors, simple and direct means of cleaning out and self-packing joints in our furnaces make for a degree of merit which, supplemented by perfectly gas-tight, strong and durable construction, renders them at once the most attractive to the dealer and user of any furnaces made.

Our Line Comprehends Furnaces with steel plate or cast iron radiators which are adapted for burning hard coal, soft coal, or wood.

We invite personal investigation.

See pages 4 and 5 for illustrations



THE BOYNTON FURNACE COMPANY

147 and 149 Lake Street, CHICAGO
207 and 209 Water St., NEW YORK

THE BOYNTON FURNACE CO.
BOYNTON'S PATENTED SQUARE POT
NEW YORK — CHICAGO

BOYNTON SQUARE POT FURNACES

NEW GAS TIGHT

Self-Cleaning Furnace
All Cast Iron

Made in Four Sizes

CRUSADER FURNACE

Steel Plate or Cast Radiators
Brick Set or Portable Form

Made in Six Sizes

THE BOYNTON FURNACE CO.
BOYNTON'S PATENTED SQUARE POT
NEW YORK — CHICAGO

STEEL DOME

Down Draft Furnace

Made in Four Sizes

ADMIRAL FURNACE

Made in Five Sizes

THE BOYNTON FURNACE CO.

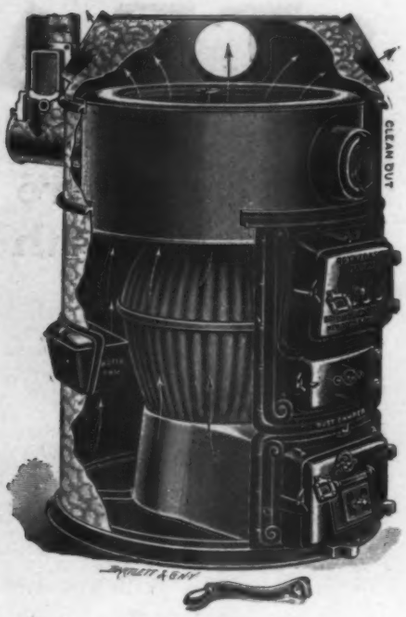
NEW CHAMPION

For Wood Fuel only
Brick-Set or Portable Form
Oblong Fire-Pot

Made in Four Sizes

PATRIOT

Steel Plate or Cast Radiator
Portable Form only
Round Fire-Pot



Made in Four Sizes

Illustration showing novel construction of fire-pot.

Patented in the United States No. 749203. This patent covers the only square furnace fire-pot extant and will be vigorously protected.

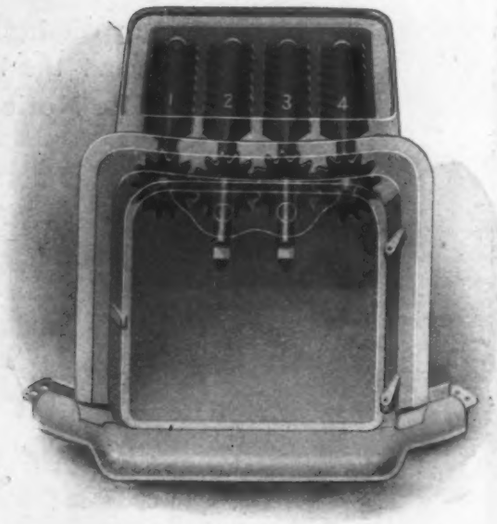


Illustration of Boynton's Square Ash Pit showing grate bars of equal length and motion

Write for Catalogue No. 70

The Boynton Furnace Company

147 and 149 Lake Street, Chicago
207 and 209 Water Street, New York

OUR MAY "FEATURES"

are Notions and 4th of July Goods

These both are lines the average jobber must handle as side issues.

Will you not profit from our unique ability to handle even "little things" in a way that makes us HEADQUARTERS for them?

Our May catalogue shows our 4th of July Goods complete and the book begins with a BIG Special Sale of **The Notions of All Lines.**

Can you afford not to know the results in these two lines of our four-house buying and our saving way of selling?

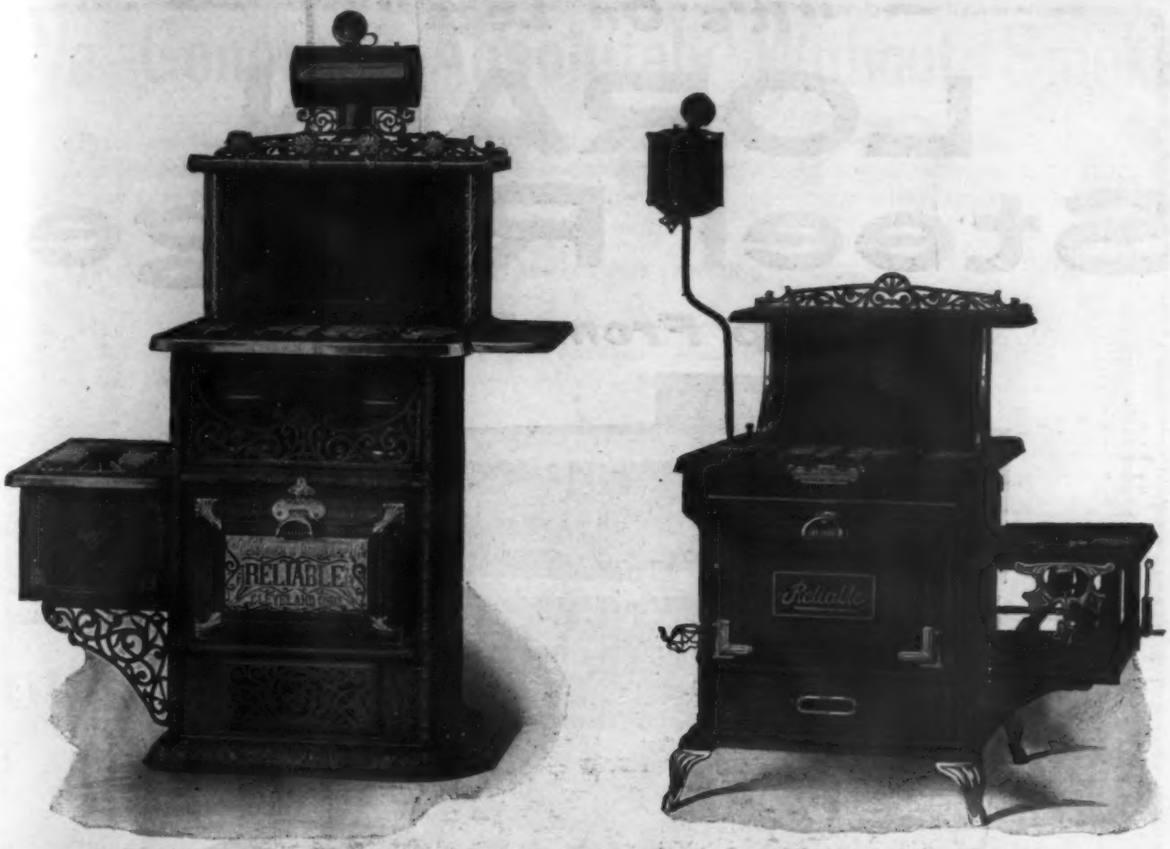
The May Catalogue is No. MC611. Shall we send it?

BUTLER BROTHERS

"The House That Covers the Country"

NEW YORK CHICAGO ST. LOUIS MINNEAPOLIS

Sample Houses: BALTIMORE, DALLAS



The Reliable Gasoline Stove

is the quickest selling summer stove that the market affords

BECAUSE

Its handsome appearance immediately attracts the attention of the prospective buyer and arouses his interest.

The many meritorious features embodied in its construction and its simplicity of operation (most quickly and easily demonstrated by the dealer) never fail to create the desire to possess and finally, knowledge as to reasonableness of the price asked for it speedily effects the sale.

There are just fifty sizes and styles of Reliable Vapor Stoves and Ranges made. Each and every one fully guaranteed by

SCHNEIDER & TRENKAMP CO.

Div. of American Stove Co.

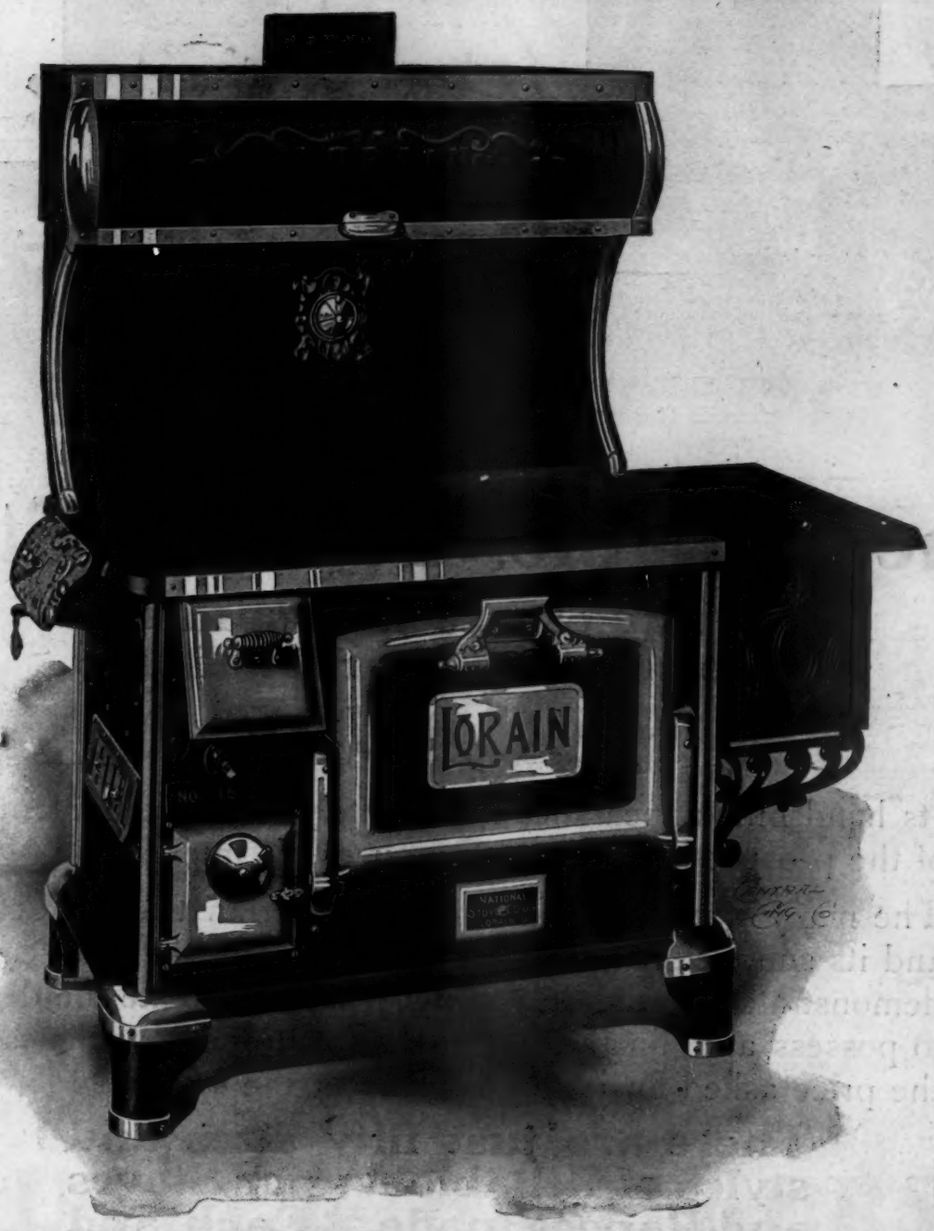
CLEVELAND

Ask for Catalog No 32-A. **Branches at NEW YORK, CHICAGO, SAN FRANCISCO**

"It's On Legs"

LORAIN Steel Range

Built Up From The Floor



We want a live dealer in every town to sell the Lorain. Catalogue and discount upon application.

MANUFACTURED BY

National Stove Co. Division American Stove Co. **Lorain, Ohio**

Western Branch
4th and Elm Streets, St. Louis, Mo.

Philadelphia Branch
31 North 2nd Street

LORAIN RANGES ARE ALSO SOLD BY

MARSHALL WELLS CO., Duluth, Minn., Winnipeg, and Portland, Oregon
PACIFIC STOVE CO., Los Angeles and Oakland, Cal.

We Generate Absolutely Without Smoke

Place one of our new B. & B. Single Generator Gasoline Stoves beside one of the kind which our competitors make. Generate them at the same time in the presence of your customer. Will he buy ours which generates with a **beautiful blue flame,** entirely free from smoke or soot, or will he choose the competitor's with its smoky torch?

The test is a simple one. Order a sample and convince yourself.

The B. & B. Single Generator is built to win. Back of it is our complete experience in accurate, thorough-going stove building. There are bigger profits and fewer complaints for you in this stove. Permit us to submit prices and catalog.

MANY OTHER B. & B. ADVANTAGES

You will find our stove original and improved in many other respects. **In neatness** and **attractiveness** the **bicycle tubing,** which conveys the gas to the auxiliary burners, is a big advance on the rough castings which others use.

No. 78

GLAZIER STOVE CO.

CHELSEA, MICHIGAN

Chicago Agent, W. D. SAGER
38 MICHIGAN ST.

PORCELAIN LINED RESERVOIR

SELMA STEEL RANGE

OUR LEADER

Quality High, Price Low.

POSITIVELY
The Best Range in the Market for the Money.

Made of Best Quality Polished Blue Steel.

OVEN EXTRA LARGE
Well Braced and Made of One Piece Extra Heavy Steel.

Heavy Sectional Linings.

Cast Oven Plate.

Full Nickel Plated Trimmings

For COAL or WOOD.

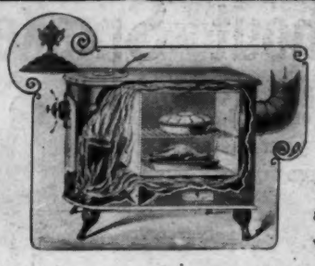
Asbestos Lined

Guaranteed Perfect Bakers.

Send for Our Complete Catalogue.

MANUFACTURED BY

The E. H. HUENEFELD CO., Cincinnati, Ohio



Your name on a postal brings Catalogs and full information

Do a Paying Stove Business

We wish to tell every merchant who reads this ad. how he can make big money handling our **Wonderful Cosby Patent Bakers and Heaters.** No more useful or salable household article on the market.

UNION STOVE COMPANY, Inc., 501 Mutual Bldg., Richmond, Va.

Ranges CHEAP—Not CHEAP Ranges

You can buy of me, steel ranges that will outclass any catalogue-house ranges. **Positively the best ranges obtainable for the money.**

Willard Steel Ranges

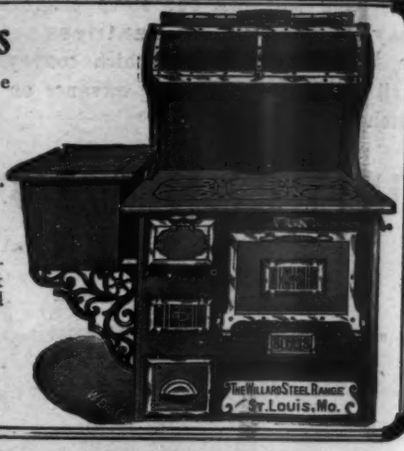
are good, honest quality, durable, economical ranges at a L-O-W P-R-I-C-E. They are made well, bake well, cook well and **Sell Well.**

QUICK SELLERS—GOOD PROFIT

There is an enormous demand for **Willard Steel Ranges.** Extensively advertised; people know them—want them—and the quicker you get them in stock the more money you'll make. For the good of your pocket book—write—I will make you the greatest proposition on ranges ever offered.

YOUR OWN NAME PLATE ON RANGES ON ORDERS OF TEN OR MORE.

WM. G. WILLARD, Room No. 28 Willard Bldg., (316 CHESTNUT STREET) **St. Louis, Mo.**



STEEL RANGES THAT SELL WELL

MR. DEALER:—

If you are looking for a STEEL RANGE that will cook and bake well and make friends for you whenever you sell one, let me send you my interesting proposition on

WILLARD STEEL RANGES

These Ranges are of the best quality, made of the highest grade of cold rolled malleable steel plates. They are **not** cheap ranges, but possess **quality,** and are sold at **low prices.**

WILLARD STEEL RANGES WILL MAKE MONEY FOR YOU

With these Ranges you can defy catalog house competition.
Write me today for my offer to dealers.

YOUR OWN NAME PLATE ON RANGES ON ORDERS OF 10 OR MORE.

WM. G. WILLARD, Room 31 Willard Bldg., (316 CHESTNUT STREET) **St. Louis, Mo.**

High Merit based upon proper construction makes the **WISE** a favorite in the hearts of those who are well informed and know real excellence.

GET A CATALOGUE AND LEARN MORE ABOUT IT

The Wise Furnace Co.

AKRON, OHIO

More Points of General Merit

are found in the

PEORIA LEXINGTON STEEL RANGES

than in any other

They have all the latest improvements of practical value to Steel Ranges. They are the best, most substantial, most perfect operating ranges made. There are

Many Good Features

embodied in the Peoria Lexington Steel Range. Thermometer in Oven, Large Fire Box, Duplex Grate, Deep Ash Pit, Large Bailed Ash Pan, Ash Chute, Large Pouch Feed Door with Register and Zero Drop Handle, Cast Iron Back Flue or Smoke Box, Oven Bottom very heavy, securely braced, NON-BREAKABLE OVEN DOOR (recently patented), High Closet Roll Top Door, Enameled Reservoir, Nickel Ornamentation very elaborate, elegant and attractive, Aluminized Oven.

Write for Printed Matter.

Culter & Proctor Stove Co.

Hamilton and Water Street PEORIA, ILLINOIS

Our Motto is and Always has been Not How Cheap—But How Good.

Three-Burner Style

Champion Mission Cooker

Is something entirely new in Gas Cooking Stoves
Something Everybody Will Want

The Champion Mission Cooker, made of heavy steel and angle iron, nicely black japanned and strongly braced, having loose grate over each burner, is an **ideal, economical summer cooker,** for by the addition of an oven anyone can have a **first-class** permanent **gas cooking** and **baking apparatus** at about **one-third** the **cost** of a gas range. Made in two and three burner styles.

Don't be Too Late to Get the Agency
Order Now and Make Sure

The Champion Steel Range Co., Cleveland, O.

STEEL CASING RINGS

Are Made to Conform to Individual Requirements in Every Respect

NEVER BREAK **CIRCLES PERFECT**

With Lugs—For Double Casings
Without Lugs—For Single Casings
Full Circles—For Ordinary Use
Partial Circles—For Full Cast Fronts

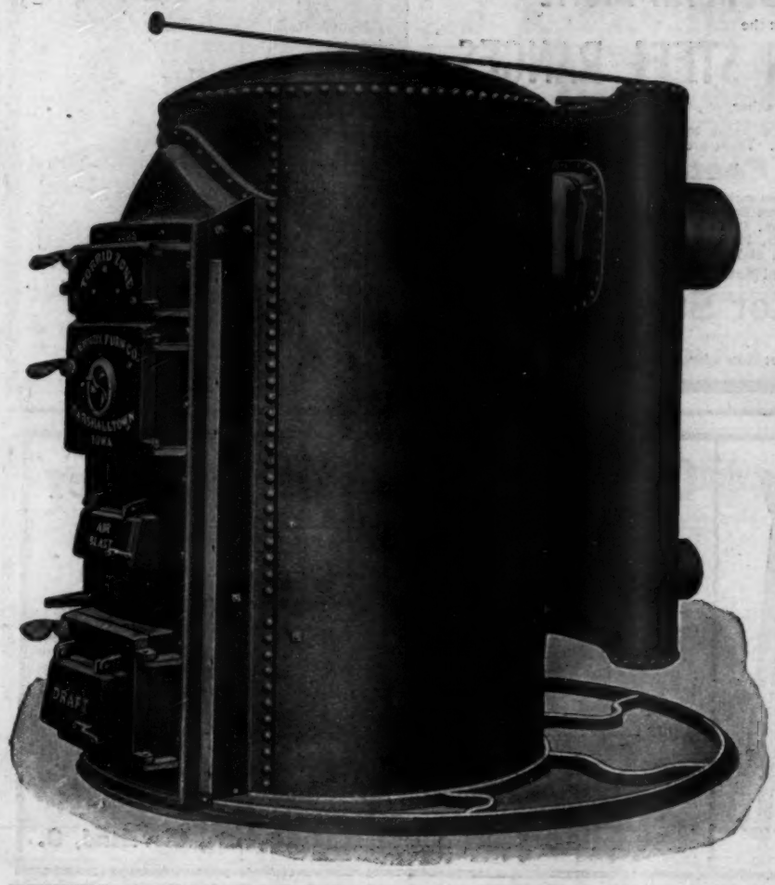
Always to Exact Circumference From Your Own Dimensions
Write Now

READY TO USE **INCREASE PROFITS**

THE WALWORTH RUN FOUNDRY CO., 27th St., S. W., Cleveland, O.

Makers of Fine Grey Iron Castings :: :: Mfrs. of Semi-Steel Registers

Large Radiating Surface Important



It is the radiating surface which determines the amount of heat a furnace is going to get out of the fuel used. The size of the fire pot determines the amount of fuel a furnace will burn.

Lennox Torrid Zone

steel furnaces have very large radiating surface nearly doubled in area by the extra indirect radiator through which the hot smoke is made to pass for eight feet of smoke travel. A hanging partition in this radiator causes the smoke to descend within eight inches of the bottom of the radiator before passing up the other side. This is longer smoke travel than any other furnace has and is possible only by reason of the convenient direct and indirect draft change. In Torrid Zone furnaces the indirect draft does not have to be strong enough at all times to permit of opening the fuel door for the direct draft can be had at one pull of a damper rod. Thus when fuel door is closed and damper is turned for indirect draft more of the hot gases can be held back from escaping up the chimney and used as fuel. This makes Torrid Zone furnaces fuel savers. It is only one of the many great selling points of this furnace.

WRITE FOR 40-PAGE CATALOG

Lennox Furnace Co.

Marshalltown, Iowa

Errors Are Often Committed

in selecting a furnace on the size of fire pot only. A furnace with a big fire pot may be a big waster, and little heater.

Compare its capacity for consuming fuel with its capacity for rapidly heating a proportionately large volume of air.

The MUELLER—All Cast—Double Radiator Furnace possesses more direct heating surface than any other heater made.

It is constructed on practical and scientific principles, to heat the largest possible amount of air, and sending the least possible heat up the chimney.

It is More Economical than any other

L. J. Mueller Furnace Co.

Established 1857

191 Reed Street **Milwaukee, Wis.**

ROBINSON TUBULAR FURNACES

ARE THE ONLY TUBULAR FURNACES

Having Direct Draft and Return Flue

WITH LONG FIRE TRAVEL

Large Radiating Surface
Seamless Boiler Flue
Broad and Deep Ash Pit

The Dust Flue with Damper Allows

NO ASHES WHATEVER

To pass out into basement

ALL ROBINSON TUBULAR FURNACES

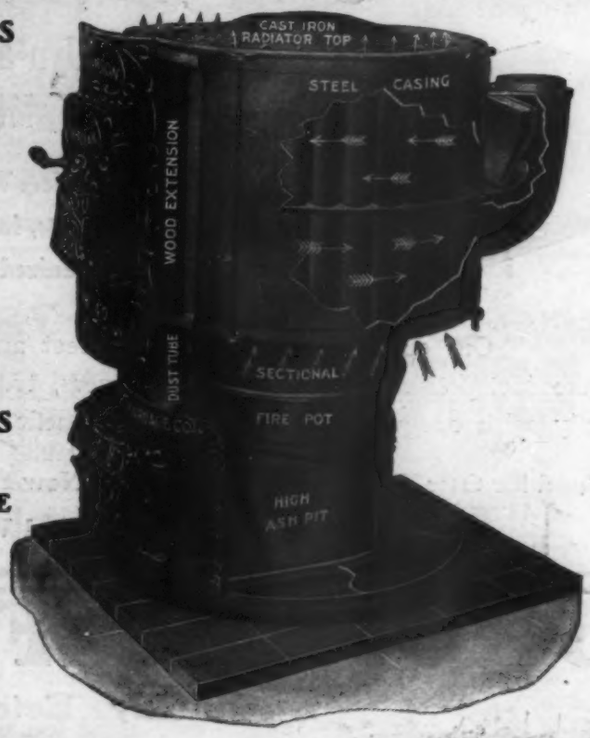
Are supplied

WITH THE CELEBRATED ECLIPSE GRATE

The fire travels farther in the "Robinson Tubular" than in any other furnace — more heating capacity, also

REDUCE COAL BILLS

Send for Catalogue



ROBINSON FURNACE COMPANY, 107-109 Lake St., **Chicago, Ill.**

The Peck-Hammond Co.'s

"600 SERIES" FURNACE

Wholly modern, all cast construction, providing strength and durability.

Tubular Radiator provides perfect circulation of hot air.

Winged fire pot largely increases radiating area.

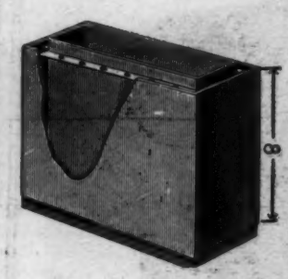
Perfectly Made
Perfectly Mounted
Gas Tight

A Popular Furnace
A Perfect Worker

Catalogues on Application

The Peck-Hammond Co., Cincinnati, O.

The Michigan Safety Furnace Pipe Company



Corner Brooklyn and Abbott Sts.
DETROIT, MICHIGAN

Manufacturers of Safety Wall Pipe and Single Pipe and Fittings, in Both Tin and Galvanized Iron

Our customers deal with us direct and us only. We do not consult with nor take instructions from any commissioners, trust or corporation. Our agreements are only with our patrons and for their benefit.

Send for Our 1907 Catalogue **Our New Factory Insures You Prompt Delivery**

Don't Get Our Name Confused With Other Manufacturers

BOOMER FURNACES

Quickly Establish a Local Reputation

It is always a little hard to introduce an old Furnace in New Territory.

But the first BOOMER Furnace you sell will pave the way for an unlimited profitable furnace business.

It is likewise better to take an old, time-tried furnace like the BOOMER, and sell it in new territory, than to continue selling, or endeavoring to sell, a Furnace that does not "stand up" the way you would like to have it.

The BOOMER Furnace is one of those always-reliable, sure-to-give-satisfaction commodities that is a genuine pleasure to sell.

The BOOMER Agency, remember, has attractive inducements.

We'll gladly send you our Furnace catalogue upon request.

The HESS-SNYDER COMPANY
Manufacturers **MASSILLON, OHIO**

The Hero Furnace

For Any Kind of Fuel
For Any Kind of Climate
—the Colder the Better.

Chas. Smith Company

101 East Lake St., CHICAGO, ILL.

Smith Auxiliary Heaters—

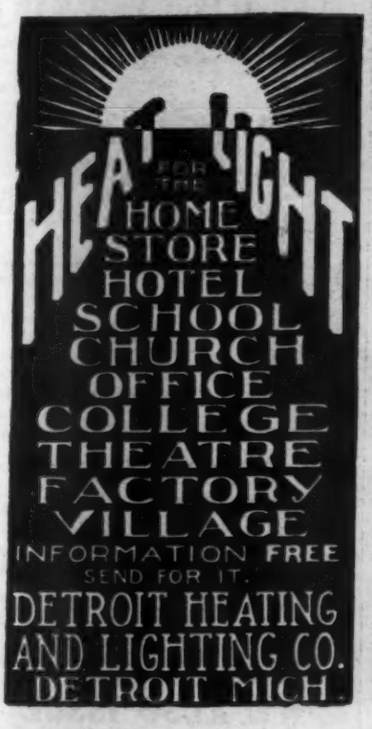
Best for Combination Work. They Fit Any Furnace Made.

The Canton Furnaces

Long Draft returning through main radiator. Clinker Punch for cleaning grate. No other furnace has these features.

Big Steel Radiator — Tubular. Perfect Blast Device. Not in the cheap class. DO YOU SELL THEM?

THE BONNOT CO., Canton, Ohio



NOTICE!

We have exceptional facilities for handling American products: Hardware, Sanitary, Heating and Ventilating Goods. Branches in England and Continent. References furnished. Address

EXHIBIT & TRADING CO.,

Main Office, 72 Henry Street, Liverpool, England

Large 10 oz. Can.

We Make It!

The BEST Air Drying Iron Enamel Made.

Try a 1-Dozen Case From Your Jobber

Nickel Plate Stove Polish Co.,
CHICAGO.

Cast Iron Furnaces

with

Heavy Steel Plate Return Flue Radiator

SIMPLE, DURABLE, Powerful, Economical

The material used in the construction of this Radiator is of the

Best Quality Bessemer Steel Plates

Castings are made of the

Best No. 1 Foundry Iron

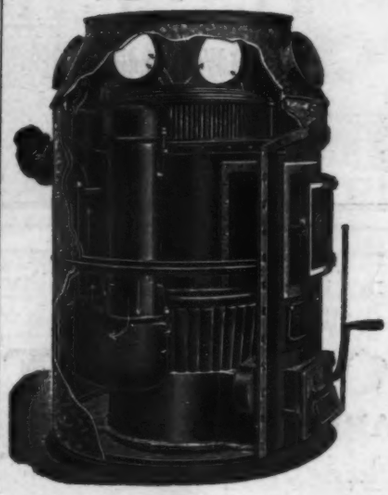
ABSOLUTELY

Gas, Dust and Smoke Tight

Send for Printed Matter

Walter S. Rait & Company
211-215 Lake Street,
CHICAGO, ILL.

Floral City Furnaces



were designed to meet the demand for a heater that would burn hard coal, soft coal and wood equally well. Some important changes have recently been made and it will be to your advantage to secure our latest catalog.

Tireless care, skilled workmanship and perfect castings unite in making these furnaces reliable.

Monroe Foundry & Furnace Co.

MONROE, - MICHIGAN.

WHY SPEND VALUABLE TIME

Figuring a cheap furnace in competition with furnaces of similar style and quality? The man with the lowest price gets the job in such cases. There's no profit in this class of work.

WHY NOT BE EXCLUSIVE? Sell a furnace on which you have no competition, and on which a fair margin of profit can be made.

The MUELLER All Cast, Double Radiator Furnace stands in a class of its own—no other heater made like it, and none that will compare with it in Power, Durability and Economy.

40000 Mueller Heaters in Use

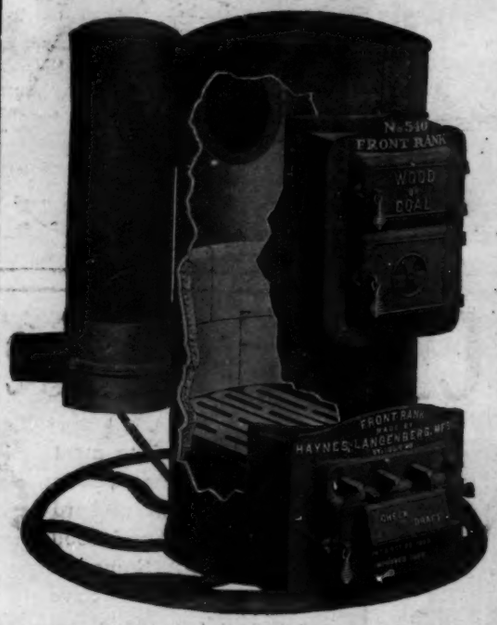
Write for Catalogue and Prices

L. J. Mueller Furnace Co.

ESTABLISHED 1857

191 Reed Street :: :: MILWAUKEE

Front Rank Furnaces



Are growing more popular **every day.** The increased business necessitated a **New Factory.** We are building it. **33,000 ft.** of floor space, equipped with the **best** and **latest machinery.** Get in the **Band Wagon** and order the Front Rank Steel Furnace.

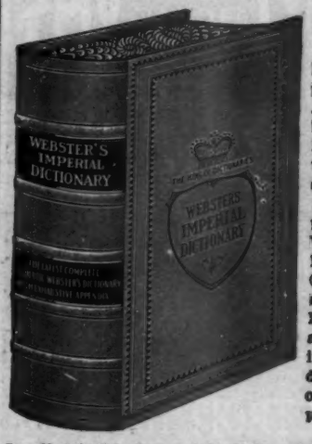
Haynes-Langenberg Mfg. Co.

ST. LOUIS, MO.

A New Webster Dictionary

We invite special attention to the fact that the latest previous complete Webster is 17 years old, and quite out of date.

A single page in this book (1089) defines **36 words** not found in Webster's International Dictionary; another page (1177) defines 23 such words. **RADIO, the various RAYS, TRUST, BANZAI, GARAGE, SHIMOSE,** etc., and all other modern words, also old words with modern meanings, such as **GRAFT,** are properly defined.



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A few of the many good points of the MONCRIEF
- All Cast Iron
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L. D. McQUISTON & CO., Monticello, Ark., write: "You may discontinue our want advertisement as it has already brought about the required results."

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Do you know that the

New Akron Air Blast Furnace

is the leader today?

It's a furnace that will mean **business for you,** money in your pocket, satisfied customers and a host of other things.

It is a good, honest quality, first-class, up-to-date, economical, durable furnace.

There's no fancy price attached to the

NEW AKRON AIR BLAST FURNACE

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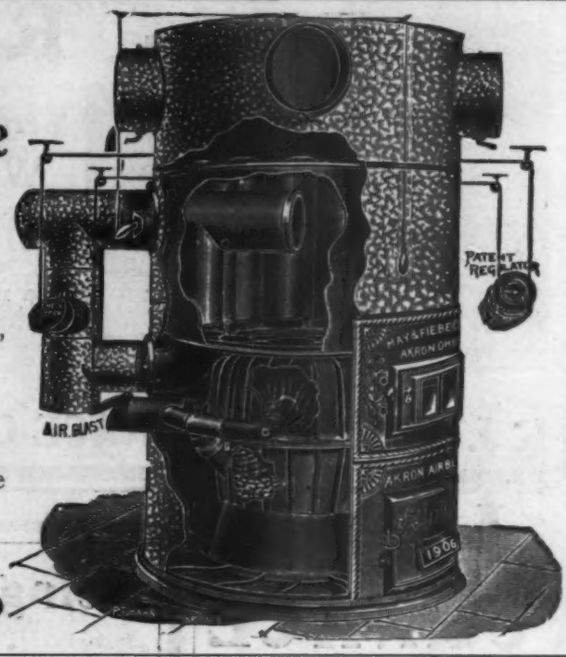

GILT EDGE BADGER FOR HARD COAL

COMBINES ALL THE FEATURES
necessary to make it a most convenient perfect working and economical furnace.

CAST FIRE SECTION
with steel dome and return flue radiator.

PERFECTLY BUILT
and perfectly mounted and having the best of all modern conveniences. Made in 20, 23, 26 and 29-inch fire-pots.

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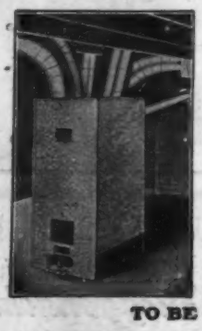

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The "MANEST"

will heat any house better and cheaper and with less labor than any other system.

The MANNEN & ESTERLY CO.
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TO BE ATTACHED TO ANY COAL FURNACE.

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Semi-Steel Floor—Cast Iron Floor
Wrought Steel Special Side Wall
Cast Iron Special Side Wall

We make them all—in all finishes
Get our prices before buying

ESTABLISHED 1857

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LION FURNACE

Can Use Hard or Soft Coal

Giving the greatest heat with the least fuel. Pot interchangeable with our Apex furnace. Durable, simple in construction and a fine seller.

Write to-day for Catalogue.

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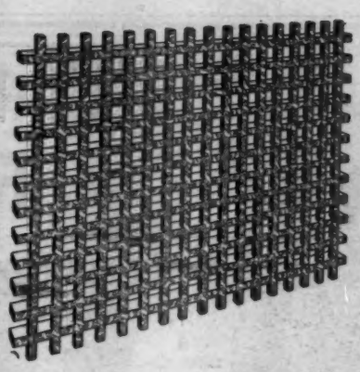

will make many customers for you. Our **Hard-wood Register Faces for cold air** will appeal to every person buying a furnace.

Tell them that you can furnish them with the furnace you sell.

It will get you the sale.

We make them in all sizes and from all Hard Woods.

As Cheap as Iron

Let us send you our price list and printed matter explaining them.

THE WOODEN VENTILATOR CO.
EAST PALESTINE, OHIO

Hold Fast Hook and Bolt Device
Patent Pending

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Showing New Holdfast Hook and Bolt Device.

One of the styles we make to install above baseboard—installation not necessary until building is finished.

New Hook and Bolt device eliminates tin strap, rivets, cleats, wood, screws, wire and nails. No breaking of plaster. Conforms with strictest fire laws. Saves time and money. Do you catch on, the hook does.

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The Marvelous Fuel Saver. Write at once for New Catalogues.
Kellogg-Mackay-Cameron Co. (Sole Owners)
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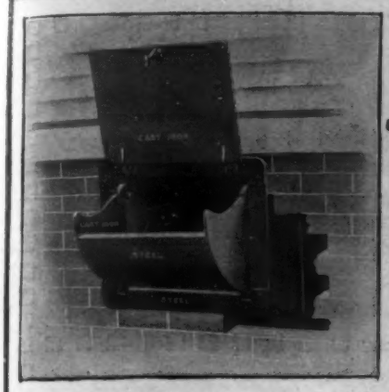

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Heavy Wrought Steel Fame, Body and Hopper.

Neat cast door which automatically locks itself open or shut. Door closes flush with the wall. Made in three sizes.

Secure the Agency NOW.

The Chappell Furnace Co.
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The Improved JONES Registers

Are the most **thoroughly** tested and **practical** fuel-saving, heat-producing registers on the market.

Absolutely Fireproof

The Improved Jones Registers

Render modern furnace work less complicated, insure **perfectly** working warm-air heating plants, **reduce the cost** of installing furnaces, and at the same time **increase** their **efficiency** and make **failure** almost **impossible.**

Send for our printed matter and learn more about

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May & Fiebeger ..... Akron, Ohio
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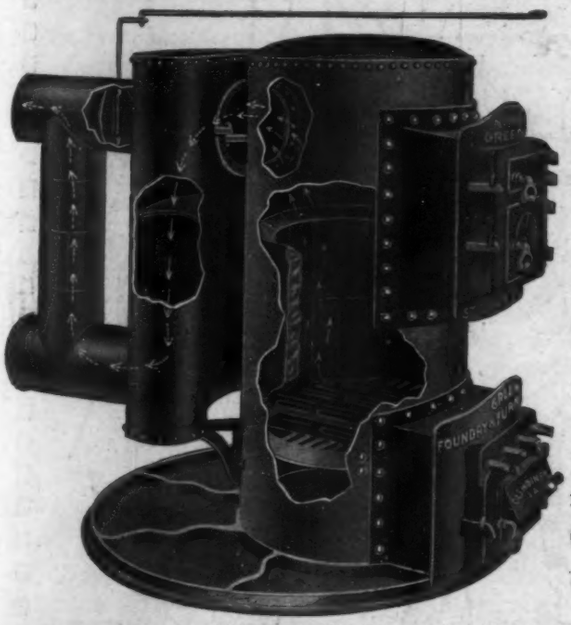
GREEN'S STEEL PLATE FURNACE



INTERIOR VIEW.

One piece of steel from top to bottom which insures Durability and makes it absolutely Gas and Dust tight. For Economy and Simplicity Green's Steel Plate Furnace has no equal.

Catalogue and Prices sent on request.

Green Foundry & Furnace Wks.
Des Moines, Iowa

The Novelty Warm Air Furnace System

To the live Furnace Agent of Progresstown:

Would it please you

To secure the contracts for heating a majority of the good residences going up in your neighborhood?
To make double the normal profit on each of these contracts?
To give these customers better value for their money and better satisfaction than they received before?
To have the results of these heating jobs absolutely guaranteed to you?

Well—the Novelty Furnace Handbook will show you HOW.

ABRAM COX STOVE COMPANY Fairhill Station, PHILADELPHIA 15-19 West Lake St., CHICAGO

ROUND OAK

STANDARD OF AMERICA

When it is
just as easy
to get a genuinely good
Furnace and do a much
more satisfactory
furnace business,
why not try the
"Round Oak Way"?
We have something to say
about a good furnace
and good
furnace work that won't bore
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who is ambitious
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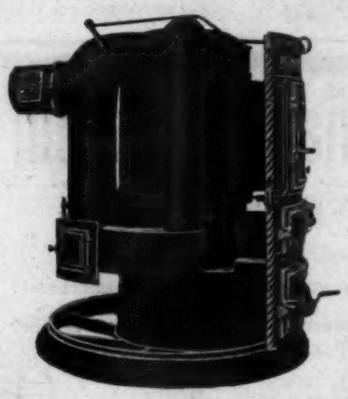


"Your uncle told me zebras always feel the cold here, Fritz, so I brought my sweater."

"Is—is it made of your own skin?"

"It is—knit!"

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

TERMS OF SUBSCRIPTION IN THE UNITED STATES, THEIR POSSESSIONS AND CANADA, (Invariably in advance): ONE YEAR, POSTAGE PAID, $2.00. IN FOREIGN COUNTRIES EXCEPT CANADA, ONE YEAR, POSTAGE PAID, $4.00.

Address all Letters, communications, and remittances to

DANIEL STERN, PUBLISHER AND PROPRIETOR,

69 DEARBORN STREET, CHICAGO, ILL.

Entered at the Chicago Post Office as Second Class Matter.

THIS PAPER IS A MEMBER OF THE CHICAGO TRADE PRESS ASSOCIATION.

CHICAGO, MAY 4, 1907.

IT IS with lightning rods as with all other goods—quality counts.

THE consensus of opinion seems to be that a good lightning rod, properly erected, is a pretty sure means of protection.

SEVERAL lightning rods have been erected in the vicinity of Washington, D. C., to attract presidential lightning. The human structures equipped with them would prefer to be struck.

THE Japanese government has just placed with American manufacturers an order for $9,000,000 worth of railway equipment and materials, including steel rails, bridges, electric lighting plants and locomotives. The new-old nation promises to be a good customer and it will pay us not to quarrel.

A LEADING Eastern manufacturer recently summed up the present conditions, which include a very general debate upon business prospects and the likelihood of a continuance of prosperity, in the following statement: "Psychological laws prevail everywhere, and they say emphatically, 'If you talk bad times you will get bad times.'" It was Mr. John A. Walker, vice-president of the Joseph Dixon Crucible Company, of Jersey City, who voiced this idea, which we can only characterize as sturdy common sense.

A SPLENDID tribute to the men who do the manual work of the world is paid by Rudyard Kipling in his latest poem of soul-stirring interest, "The Sons of Martha." It is a tribute to their patience and their long-suffering, their unconscious heroism and self-sacrifice. We can well pardon the poet his biting sarcasm at the expense of those who give the angels credit for the safety they enjoy in travel, forgetting the humble but faithful worker constantly on the watch to see that "the nuts do not work loose."

A very practical and hence valuable article on "Show Window Dressing," from the pen of Mr. Adolph G. Droegkamp, of Milwaukee, Wis., prize winner in our recent Window Display Competition, illustrated with a seasonable display of paints, etc., just made by the author, will appear in THE AMERICAN ARTISAN of May 11.

The Stove Manufacturers' Meetings.

WHEN the stove manufacturers of the country gather in annual meeting at the new Hotel Astor in New York City next week they will be able to compare notes upon the results they have attained during another year of the present era of unparalleled prosperity in the United States. For most of them it has undoubtedly been a year of great business accomplishment and we believe the stove trade faces the future with every confidence not only in the outlook for the coming year, but in the constant, steady growth of the demand for its products, to be caused by constant and steady increase in the population of the country and in the number of American homes.

There are not wanting those who believe that within the next 25 years the population of the United States is to be almost doubled and who shall say that such prophets are merely optimistic souls? The cold-blooded statistics prepared by the government at Washington prove the most marvelous increase in population that the world has ever seen, and all present indications are that the increase is to continue unabated if not in greater measure. The stove business as much as any other keeps pace with the growth of population and the present outlook in the trade seems unclouded.

The co-operation among stove manufacturers which is represented by the National Association of Stove Manufacturers is conducive to the best interests of the trade and we trust it may long continue. We congratulate the association upon the substantial and steady growth it has had in the past under the careful tutelage of able, loyal and energetic officers and we wish for the association continued prosperity and usefulness and for the forthcoming annual meetings the fullest possible measure of success.

Lightning Rods as a Side Line.

In this issue of THE AMERICAN ARTISAN we present to our readers the views of some of the leading manufacturers of lightning rods on the present condition of the lightning rod industry, the outlook for the season of 1907, and the desirability of lightning rods as a side line for the hardware retailer. There is some difference of opinion upon the latter point, but nearly all of the manufacturers heard from regard the hardware store as a legitimate market-place for lightning rods, while one prominent manufacturer goes so far as to say that he regards the lightning rod business as the very best side line which the hardware dealer can handle.

A complete change has come over the lightning rod

business since the days of the peripatetic swindler who made the phrase "lightning rod agent" synonymous with liar and cheat. To-day the business is in the hands of reputable manufacturers who see to it that only respectable and trustworthy representatives do business in their name, and there is growing confidence in the character of the lightning conductors now offered to the public and in the men who sell them. This is a changed condition upon which the lightning rod trade is to be congratulated and we bespeak for our presentation of the manufacturers' views the most careful consideration by hardware men.

Doubled in a Decade.

ONE of the most significant facts that have been recently brought out in connection with our export trade is contained in the official statement by the Bureau of Statistics of the Department of Commerce and Labor that the exports of manufactures from the United States, now exceeding 700 million dollars per annum, have doubled in value in a single decade.

Not only has the exportation of manufactures doubled in a decade, but the share which products of the factory form of the total exports is steadily increasing. In 1880 manufactures formed but 15 per cent of the total exports of domestic products; in 1890 they formed 21 per cent, in 1900, 35 per cent, and in 1906, 40 per cent.

The increase in the production of manufactures in the United States, far in excess of home requirements, has forced our manufacturers to seek markets in other parts of the world for their surplus product. The result has been a rapid increase in the exportation of manufactures. The total value of manufactures exported from the United States has grown from less than 8 million dollars in 1820 to 23 million dollars in 1850, 48½ millions in 1860, 70 millions in 1870, 122 millions in 1880, 179 millions in 1890, and 485 millions in 1900, since which time the annual total has not fallen below the 400-million-dollar line, while in the calendar year 1906 the total exceeded 700 million dollars. In the fiscal year 1906, the latest period for which detailed figures of the exports by countries are available, the exports of manufactures were valued at 686 million dollars, of which 318 millions' worth went to Europe, 182 millions to North America, 64½ millions to South America, and 78¾ millions to Asia, while the remainder was divided between Oceania and Africa.

That this growth has been especially marked in recent years is shown by the fact that the actual increase by decades in exports of manufactures has been as follows: During the decade ending with 1830, 1.8 millions; 1840, 5.8 millions; 1850, 7.8 millions; 1860, 25.2 millions; 1870, 21.6 millions; 1880, 51.8 millions; 1890, 57.2 millions; 1900, 305.9 millions; and during the six years ending with 1906, 201.5 millions. Thus the growth of exports of manufactures in the sixteen years following 1890 was practically three times as great as that of the entire seventy years preceding that year.

These statistics of an official and reliable character should not only cause the breast of the American citizen to swell with patriotic pride, but they should serve as a straight tip to the American manufacturer that the eyes of the consuming world are upon him. His opportunities are simply immense.

The Bureau of Manufactures.

Letters of inquiry which reach THE AMERICAN ARTISAN indicate that there is more or less lack of knowledge on the part of many business men as to the nature of what is well known to the press as the Bureau of Manufactures. We have received some communications asking for the address of the Bureau, and others which indicate an impression on the part of the writers that the Bureau is maintained by some association of manufacturers.

This lack of knowledge is undoubtedly due to the fact that the activities of the Bureau of Manufactures, which is a bureau of the Department of Commerce and Labor, at Washington, are of comparatively recent date. The Department of Commerce and Labor itself is, of course, of recent creation. It is one of the brightest stars in the crown of recent governmental achievement in the United States, and corresponds in some degree with the British government department known as the Board of Trade, at the head of which is a cabinet officer, like the Secretary of Commerce and Labor in this country.

The commercial reports of our consuls in foreign countries are received and handled by the Department of Commerce and Labor and the Bureau of Manufactures issues a very useful and creditable publication every working day in the year under the title "Daily Consular and Trade Reports," which is freely circulated among the newspaper and trade press and has proved a very valuable adjunct to editorial means of information as to foreign trade opportunities and the handling of commercial problems abroad.

Manufacturers can secure many valuable tips from the Bureau of Manufactures, which is ready at all times to afford information upon the subjects that come within its province. Commercial inquiries from abroad are systematically filed by the Bureau and are published from time to time under their file number in the Daily Reports. The Bureau is doing a great and important work for American commerce and manufacturers are invited to remember that it represents Uncle Sam's helping hand freely extended to them—and that its address is Washington, D. C.

RANDOM NOTES AND SKETCHES.

BY SIDNEY ARNOLD.

OUR mutual friend, W. P. Bogardus, came up from Mount Vernon, Ohio, to Chicago the other day looking care-free and comfortable. Having shed the responsibilities attaching to the presidency of the National Retail Hardware Association he feels himself at liberty to carry out his motto, which is that of the old lady who, on being asked to pray for what she wanted most in life, said with deep sincerity: "O Lord, let us be comfortable."

Mr. Bogardus is a confirmed officeholder in his home town, though he doesn't look the part and nobody would accuse him of it. For twenty years he has enjoyed the confidence of his fellow citizens, who

simply insist on electing him to office in spite of his desire to lead a comfortable life. Mr. Bogardus refuses to work for a nomination or to hustle for votes when nominated, but does not shirk public duty when he is called to it, regarding it simply as good citizenship to perform the duties of a public office when he is elected to it. At present Mr. Bogardus is the president of the school board of Mount Vernon, and he is a strong advocate of the extension of educational facilities for the young and of the principle of manual training. His town is building something like $50,000 worth of schools this year and though you would never believe it, Mr. Bogardus has just been "up against" the catalogue-house game—not as a victim, however, he is too wise for that, but as a spectator.

What do you think of Jeers, Sawbuck & Co. of Chicago soliciting business from the Mount Vernon school board, with Mr. Bogardus as its president? I understand that they offered genuine oak mantels to the board for their new schools at next to nothing apiece, with varnish thrown in, and held out other tempting bait to the Mount Vernon people if they would only furnish their new school rooms on the catalogue-house plan. Up to date I believe they have failed to find victims in the school board, and I also understand that the mail-order trade in Mount Vernon is fast dwindling to nothingness.

* * *

I am in receipt of an interesting communication from a western firm of hardware dealers who write me as follows:

Dear Friend:

We have before us a copy of a catalogue issued by the Larkin Company of Buffalo, N. Y., on the opening page of which is the following announcement:

STOVES AND RANGES FREE WITH THE LARKIN PRODUCTS.

This catalogue contains a complete line of stoves and ranges offered free with the Larkin products. All are made by leading manufacturers, which, taken in connection with the fact that they are offered by the Larkin Co., is assurance that whichever one you select will give full satisfaction. You can save much money by Larkin factory-to-family dealing. Let us serve you.

These Larkin people make everything from never-shrink soap to the neatsfoot harness oil, from snowflake crackers to camphorated pills, and from belladona plasters to toe and bunion cures, including coffees, teas, cigars and God only knows what else.

As a special offer to introduce their goods they now offer all sizes and styles of Garland steel ranges and heaters free to the purchasers of said products. We presume that you are not aware of this, and have reason to believe that you can make some very spicy reading matter of it for the benefit of our brethren. If you are so disposed, we wish you would secure one of their catalogues and look it over for yourself.

This opens up a case which I believe plainly calls for the intervention of the officers of the National Retail Hardware Association. It is the first case that has come to my notice involving the use of stoves and ranges as premiums and the National officers may be able to nip such a movement in the bud, as has been done in the case of other goods offered as premiums by large concerns like the Larkin Company and affecting other trades than the hardware trade.

Such an innovation as this threatens the interests of the retailer of stoves—the hardware dealer, and needs the immediate attention of the hardware retailers' official representatives in the National and also in the State associations. Action promptly taken by them may prove effectual in putting a stop to such transactions as must have taken place between the Larkin people and the manufacturers who supply their stove premiums. There is little loyalty to the retail trade in such a deal and I believe the trade in general will set the seal of its condemnation on the idea. If so, it may die a-bornin'.

The stove manufacturers' annual meetings, by the way, are soon to be held—in fact, they will assemble at the Hotel Astor, in New York, during the coming week, and it seems to me that this would afford an excellent opportunity for the national representatives of the retail hardware trade to meet the manufacturers and bring their influence to bear to prevent the extension of this stove-premium idea. Such a step would be beneficial to the interests of the trade at large, and I believe the National officers could make the stove manufacturers see it that way.

* * *

Blithely I hasten to place before my myriad readers the latest specimen of peerless poesy which I have been able to cull from the vast field of modern business literature to add to my unparalleled collection. This time it is a poetess, Mrs. J. Firth, of Latonia, Kentucky, who sings in imperishable strains to the tune of "The Old Oaken Bucket" a tribute to the popular product of the Toledo Cooker Company, as follows:

THE SONG OF THE HOUSEWIFE.

How often I wished that the time would o'ertake me
When some one invented a cooker to sell
That would cook all at once the potatoes and cabbage,
The fish and the onions without any smell,
And, without water to extract the juices
That vegetables, and fruit, and meat always contain,
And thus banish forever the cooking abuses
For by such a process the flavors remain.

Oh, a new-fashioned kitchen,
An odorless kitchen,
A cool, tidy kitchen
I'd love so well.

An "Ideal Steam Cooker" I bought as a treasure
And now every Sunday to church I repair,
I find it the source of exquisite pleasure
To linger unmindful of dinner while there.
The chicken and rice, the purple tomatoes,
The pork and string beans and the "roastin' ears," too,
The sauce and the pudding and big sweet potatoes,
The cooking of which one burner will do.

Oh, the gas-saving cooker,
The time-saving cooker,
The "Ideal Steam Cooker"
That I love so well.

There are several more stanzas in this domestic lay, all fully up to the sample quoted, and those of my readers who hunger and thirst for more (now that I have whetted their appetites) can secure the remainder of the song of a satisfied housewife by inditing one of Uncle Sam's nice clean postals to the Toledo Cooker Company in the Ohio town of the same name.

* * *

A speaker at a recent trade banquet in Chicago gave the following simple rules for the guidance for those who would succeed in any calling: "Have confidence in yourself, have hope in the future, and always and forever in your heart eternal sunshine." These rules were applauded by all who heard them and I cheerfully pass them on for the benefit of the greater constituency comprising the readers of this page.

News Siftings

The Globe Heater Company, St. Louis, Missouri, has been incorporated with a capital stock of $10,000.

The Dunn & Wood Hardware Co., of Rhinelander, Wis., has filed an amendment to its charter increasing its capital stock from $10,000 to $25,000.

W. H. Culver of Grand Rapids, Michigan, will establish a branch factory at Meeker Junction, Washington, for the manufacture of fireless cookers.

H. R. Ripley, G. C. Harris, Cal. George and L. George have incorporated the Bristol Stove & Foundry Company, Bristol, Virginia, with $25,000 capital.

The Central Oil & Gas Stove Company of Gardner, Massachusetts, will engage in the manufacture of automobiles in a new building 100x100 feet, just completed.

The Cascaden Manufacturing Co. of Waterloo, Iowa, manufacturers of stoves and ranges, grinding mills, feed cokers and heavy hollow ware, have increased their capital stock to $400,000.

The Southwestern Tariff Committee has announced that, beginning May 22, a one-third rate will be put on stoves, less than car lots, that are crated, and first-class rates will be charged when they are not crated.

The old firm of Rogers & Co., Royersford, Pennsylvania, manufacturers of stove linings, fire brick, etc., has been incorporated. W. L. Latshaw and H. C. Saylor of Royersford, and H. V. Rogers of Spring City, Pennsylvania, are the directors.

A very practical and hence valuable article on "Show Window Dressing," from the pen of Mr. Adolph G. Droegkamp, of Milwaukee, Wis., prize winner in our recent Window Display Competition, illustrated with a seasonable display of paints, etc., just made by the author, will appear in THE AMERICAN ARTISAN of May 11.

Mr. H. J. Knight, credit man for F. M. Borden & Bro., of Philadelphia, has developed into a baseball umpire of high degree. Although the season has been open only a short time he has already umpired a game at Moorestown, New Jersey, and his friends say that judging from the ability he displayed at that game it is expected that he will be kept very busy umpiring during the season.

The Bloomington, Illinois, Bulletin says: "The sale of the plant and works of the Bloomington Stove Company, which was set for May 4th, has been changed to May 11th and instead of the property being disposed of at the east door of the court house it will be sold at auction on the grounds of the company on the above date. The sheriff will have charge of the bidding. The real estate will be offered for sale by lots and then as a whole. All of the office fixtures and the machinery used in making stoves will be offered separately and the ground, plant and personal property will be offered in a lump."

The S. Obermeyer Co. of Cincinnati, Ohio, are making extensive improvements to their main manufacturing plant at Cincinnati. They are erecting an additional factory, 50x75 feet, two stories, of brick and steel construction. They are installing a new power plant with a 500 H. P. Corliss engine, with improved rope drive. They are equipping their facing mill with entire new up-to-date modern machinery and when the improvements are completed they expect to have the largest and most up-to-date facing mill and foundry supply establishment in the United States.

The Richardson & Boynton Co., Dover, Del., whose entire plant was shut down when 150 laborers struck for higher pay on April 8, announced by published notice that they would "endeavor to start the works on Monday, April 22, 1907, if a sufficient number of porters and laborers can be secured." It was expected that all the skilled men would be on hand to go to work, as their organizations are under contract with the company and have not by any official act recognized the laborers' strike. Whether the leaders of the laborers' union will be able to hold their men out or not cannot be foretold. The men suppose that the company has secured some new laborers or it would not attempt to resume operations. The firm announce that it is not their intention "to hire as many men as heretofore, as the general business condition does not warrant it."

THE STOVE MANUFACTURERS' MEETINGS.

The annual meetings of stove manufacturers to be held at the Hotel Astor, New York, next week, are expected to be largely attended and unusually interesting.

The Western Association of Stove Manufacturers will be the first organization to meet at the Hotel Astor, the date of the convention being Monday, May 6.

The Stove Founders' National Defense Association will hold its annual meeting on Tuesday, May 7, when the annual address of President D. McAfee will be delivered and various matters of private interest to the manufacturers will be discussed.

The National Association of Stove Manufacturers will meet in annual convention Wednesday and Thursday, May 8 and 9.

Mr. Thos. J. Hogan, secretary of the National Association of Stove Manufacturers, has sent a second letter to the members of the N. A. S. M. and the S. F. N. D. A. to remind them of the meetings, as follows:

"Gentlemen:—This is to remind you that the date of the annual meeting of the N. A. S. M. is May 8th and 9th and the meeting will convene at 10 a. m. on the morning of the 8th at the Hotel Astor, New York City. The meeting of the S. F. N. D. A. will occur at the same place, Tuesday, May 7th, at 10 a. m. Both meetings will be of more than usual importance and I am directed to urge the attendance of every member.

"The officers of the N. A. S. M. have prepared a most excellent program. A few very important papers are to be read, either one of which will pay many times over the expense incurred by attendance at the meeting. For the entertainment of the members a very fine program has been prepared for Wednesday evening, May 8th. Special arrangements have been made for the care of any ladies who may attend."

It is understood that in addition to the excellent talent which will be presented for the entertainment of the delegates at the smoker, and the supper which is

to follow, there will be a theater party on the same evening for the ladies. Mr. Wm. M. Crane of the committee had the matter in charge, and has arranged for a theater party at the Hudson theater, to witness the performance of "Brewster's Millions," on Wednesday evening at 8:15.

VAN'S RANGES IN THE NEW SINTON HOTEL.

The John Van Range Company of Cincinnati, Ohio, lately equipped the kitchens of the elegant new Sinton Hotel at Cincinnati, the outfit consisting of one of its 28-foot extra heavy steel ranges, charcoal broilers ten feet long, two batteries of nickel-plated coffee urns, plate and silver warmers, white enameled carving tables 20 feet long, large dish-washing machines, silver and knife polishers, two large brick bake ovens, vegetable compartment steamers, and a complete system of refrigerators for meats, vegetables, wines, ice cream and milk, and also refrigerators for freezing water in carafes. In building the outfit every modern cooking appliance known to the culinary art was employed in its construction, and for convenience and completeness these kitchens, it is claimed, have no superior in the world.

While the outfit was being installed The John Van Range Company had its corps of draughtsmen and engineers on the ground constantly supervising the work and noting that the steam, water and electrical connections were properly made, and when the word was given for the opening of the hotel everything was in readiness and worked with the accuracy of a clock.

The plans and specifications of the entire outfit were drawn by The John Van Range Company, under the supervision of Mr. E. N. Roth and his celebrated St. Nicholas chef, Mr. Joe Nothelfer.

The steel range catalogue of The John Van Range Company will be sent on request. When writing, kindly mention THE AMERICAN ARTISAN.

NATIONAL STOVE COMPANY FIRE.

The plant of the National Stove Company division of the American Stove Company at Lorain, Ohio, was practically destroyed by fire April 30th with a loss estimated at $200,000, covered by insurance. The works caught fire shortly after midnight and burned for several hours. The indications were from the beginning that the fire would be a total loss.

The employes of the company and the firemen directed their efforts to saving the records from the office building, which was burned, and to saving the outlying buildings. Heroic efforts were made to prevent a total loss but they availed little in view of the fierceness of the flames.

Between 300 and 400 men, mostly skilled mechanics, were thrown out of employment as a result of the fire. The management say that the rebuilding of the plant will depend on the action of the executive committee of the American Stove Company.

The National Stove Company are manufacturers of the Lorain steel range and have a western branch at 4th and Elm streets, St. Louis, and a Philadelphia branch at 31 North Second street.

GRAND RELIANCE RANGES.

An entirely new semi-plain sheet flue range is made by the March-Brownback Stove Company of Pottstown, Pennsylvania, under the name of the Grand Reliance Range.

This range is made in two sizes, No. 7 and No. 8. It has six holes, reversible pipe collar, and nickeled outside oven shelf, end table, number plate, hearth plate and front edge of top, and can be furnished with the company's No. 10 skeleton pipe shelf at a small additional cost. It is made with a reservoir in No. 8 size only. The dimensions of the oven in this size are 17x17x11 inches; in the other size, No. 7, the oven is 15x15x10 inches.

The Grand Reliance is a range of good appearance and quality, serviceable and durable, and the manufacturers recommend it to the trade very highly as an excellent range of medium price. Complete descriptive literature with prices, etc., will be forwarded by the March-Brownback Stove Company on request. When writing, kindly mention THE AMERICAN ARTISAN.

SUPPLIES FOR THE FOUNDRY.

Frederic B. Stevens of Detroit, Michigan, manufactures and handles "everything for a foundry" and tells about the supplies which he furnishes in an interesting little publication entitled "Stevens Foundryman." In this publication Stevens' East India Plumbago or Improved Ceylon Lead, and Stevens' R. I. Core Wash are referred to as making a very favorable impression upon careful foundrymen. The Colliau Cupola Block and Stove Plate Facings are among other goods supplied by Mr. Stevens, and foundrymen are invited to get into correspondence with him and become acquainted with his goods and prices. Interesting descriptive circulars covering all the foundry supplies which he handles will be forwarded upon request. Address Frederic B. Stevens, corner Larned and Third streets, Detroit, Michigan, and when writing kindly mention THE AMERICAN ARTISAN.

OBITUARY.

Charles A. Robertson.

Charles A. Robertson, manager of the Allerton, Clarke Co., Chicago, Illinois, died from pneumonia, April 19th, at the home of his uncle in Austin, Illinois, at the age of 38. When a boy he went to work for Cutler, Woodrough Co. as stock clerk and later on became one of their traveling salesmen, calling on the Pacific coast trade, which position he held for a number of years. In 1894 he accepted a similar position with the Allerton, Clarke Co., which he continued to fill until 1902 when he was made manager. He leaves a large circle of friends to whom his death is a severe blow. He enjoyed their highest confidence and esteem and his untimely passing from the sphere of business activity is sincerely mourned.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 42 to 47 inclusive.

Carey & Kepple have succeeded to the hardware business of W. E. Carey at Baldwin, Kan.

A. B. Jones has engaged in the hardware and implement business at Las Animas, Colorado.

W. R. Cline, dealer in hardware at Pueblo, Colorado, has been succeeded by A. McGovney.

The Stuhr-Ehlers Hardware Co. of Minden, Iowa, is erecting a new one-story building 50x100 ft.

O. C. and H. A. Schuyler have bought out the Sims & Sims Hardware Co. at Dodge City, Kansas.

The Roberts & Wilk Hardware Company of Houston, Texas, has been incorporated, capital $20,000.

The Iola Hardware & Furniture Company has been incorporated at Iola, Texas, with a capital of $10,000.

The Starr Hardware Company, of Jackson, Mich., has increased its capital stock from $15,000 to $20,000.

Arthur E. Horlock has succeeded to the hardware business of A. E. Horlock Company at Hanford, Cal.

Charles F. Waldo, treasurer of the Bennett Hardware Company, Cortland, New York, died last week.

Wilson & Sons, dealers in stoves, etc., at Frederick, Maryland, were burned out on the morning of April 20.

E. C. Brekken has bought the hardware store of Scott & Barret, Pekin, N. D., and will remodel the store.

Brewer & Brown have succeeded Charles Crook, Meadow Grove, Neb., in the hardware and stove business.

A corporation has been formed under the style of the Detroit Cash Register Works to manufacture cash registers.

The firm of Grambs & Wolbert, Bismarck, N. D., has been succeeded by the G. W. Wolbert Hardware Company.

W. E. Redwick has bought a half interest in the hardware business of B. P. Youman, Vancouver, Washington.

The Alliance Hardware Company, of Alliance, Ohio, has nearly completed a six-story building, and will do both a wholesale and retail business.

The Kewaunee Hardware Co. at Kewaunee, Wisconsin, has been incorporated with a capital of $15,000, to take over the business of C. V. Mashek.

The Lorena Lumber & Hardware Company, successor to Holvey & Westbrook, at Lorena, Texas, has been incorporated with a capital stock of $20,000.

J. T. Adams & Co., of Greenwood, Mo., have been succeeded in the hardware business by Adams & Miller, D. S. Miller having bought a half-interest.

W. R. Jones of Gibson City, Ill., has sold out his hardware, stove and tinware business to T. J. McMahon of Chebanse, Ill., who will continue the same.

The paint works which have long been conducted by J. C. Scott at Freeport, Ill., are to be operated on a larger scale, the concern having been incorporated under the title of the J. C. Scott Paint Company, the capital stock being $5,000 and the incorporators J. C. Scott, E. R. Scott and W. N. Tice.

The Dillon Hardware & Enamel Company has been organized at Nashville, Tenn., by Eugene Weathers, Everett W. Trook, and H. J. Dillon. Capital $10,000.

The Doak-Mackey Hardware Company, Wetumpka, I. T., has been incorporated with a capital of $15,000, and will occupy a new two-story building, 50 x 140 feet.

Geo. W. Pitkin Co., paint manufacturers, of Chicago, announce that they will remove to their new offices and works at Benton Harbor, Michigan, in a few days.

John S. Tilley, of Watertown, N. Y., has doubled the capacity of his plant for the manufacture of step-ladders, ladders, scaffolding jacks, ladder hooks and brackets, etc.

H. W. Egan, formerly with the Townley Metal & Hardware Company, of Kansas City, Mo., has formed a partnership with S. S. Miller in the hardware business at LaPlace, Ill.

The hardware and furniture store of McGaughey & Brinks, Hartford, Ark., was recently destroyed by fire. A portion of the stock was saved and the loss is covered by insurance.

The Russell-Porter Hardware Company, of West Allis, Wis., has been incorporated. The officers are J. B. Russell, president; G. M. Russell, vice-president; J. Porter, Jr., secretary and treasurer.

A very practical and hence valuable article on "Show Window Dressing," from the pen of Mr. Adolph G. Droegkamp, of Milwaukee, Wis., prize winner in our recent Window Display Competition, illustrated with a seasonable display of paints, etc., just made by the author, will appear in THE AMERICAN ARTISAN of May 11.

A special dispatch to the Toledo Blade recently said: "A terrific explosion occurred this morning at 10 o'clock in N. T. Henderson's hardware store at Unionville Center, Ohio, in which the proprietor and Samuel Dunfee were seriously, if not fatally, injured. Henderson was unpacking goods and accidentally threw a box containing over 200 dynamite caps into the fire. The stove was blown to pieces and Henderson and Dunfee were struck by the flying fragments and also seriously burned. Six other men who were in the store were also injured, but not seriously. The building was badly damaged and surrounding houses were shaken by the explosion, which was heard for a half mile."

Mr. W. P. Bogardus of Mount Vernon, Ohio, ex-president of the National Retail Hardware Association, was in Chicago April 28th and 29th on business connected with the local telephone company of which he is vice-president. Other officers of the telephone company met Mr. Bogardus in Chicago April 29 and together they investigated the subject of automatic telephone switchboards, with the view of adopting the automatic system for their own company, which is reported to be in a very flourishing condition and

is giving splendid service, both in the town of Mount Vernon and to the farmers throughout the country. To THE AMERICAN ARTISAN Mr. Bogardus stated that the hardware business in his vicinity is very active, with excellent prospects for the entire year.

The seventh annual shad dinner of the Hardware Lunch Club of Philadelphia is to be held Saturday afternoon, May 4, at "The Orchard," Essington, on the Delaware. This occasion is always a pleasant outing and tickets are in great demand, so much so that the committee have been compelled to limit the attendance, each member being privileged to invite one guest. Secretary Frank G. Drew, in sending out the notices of the event, promised the members and their guests the usual good time.

CHICAGO REMOVALS.

Trout Hardware Co.—From 174-176 Lake street to 49 Lake street.

Edwin Hunt's Sons—From 180 Lake street to 169-171 Lake street.

George M. Clark & Company—From 72 Lake street to 82 Michigan avenue.

The Kewanee Boiler Company—Chicago office removed to 35 Michigan avenue.

Wabash Screen Door Co.—Chicago office removed to Commercial National Bank building, seventeenth floor.

American Steel & Wire Company—From the Rookery building, Chicago, to the 12th and 13th floors of the New Commercial National Bank building.

MICHIGAN RETAIL HARDWARE DEALERS.

The executive committee of the Michigan Retail Hardware Association met recently and made the preliminary arrangements for the annual convention in Detroit next August. Secretary A. J. Scott of Marine City, Michigan, writes as follows regarding the plans made:

To THE AMERICAN ARTISAN:

Our convention this year will be held on Wednesday, Thursday and Friday, August 14-15-16, at the Hotel Cadillac, Detroit, and it was decided to hold our meetings only in the afternoon, beginning at 1:30 p. m. promptly. Experience has shown us that a great many of our members like to visit the exhibits shown in the rooms and corridors of the hotel, and as a matter of courtesy to the manufacturers and jobbers who are represented at the meeting, we thought it would be nice to leave the mornings open, so that the delegates could have ample opportunity to see all the new lines of goods and visit with their friends, the traveling men, the early part of the day. In return it was decided to ask all exhibitors to close their rooms promptly at 1 o'clock, and I am sure that this mutual arrangement will be heartily approved of by all the manufacturers and jobbers who attend the convention.

A committee was appointed to look after the details of the program as follows: Henry C. Weber, Detroit; J. B. Sperry, Port Huron; J. G. Patterson, Detroit; A. J. Scott, Marine City.

In view of the situation which has developed at some of our previous meetings, when on account of a rush of business the election of officers has been postponed until some of the delegates had left for home, it was decided to make the election of officers a special order of business at 3 p. m. on Friday afternoon, the third day of the meeting.

During the next three months and a half it is unnecessary to say that the secretary's office will put forth every effort to interest the hardware dealers who are not yet members. We have already received quite a number of applications since our last convention and hope to show a substantial gain in the numerical strength when we meet in Detroit.

I will be glad to have you make such mention of the above meetings as you may see fit and hope that the same will be the means of increasing interest in the meetings. We are planning to make this the best convention which we have ever held and want the assistance of the trade papers, which has been so liberally granted to us in the past.

Thanking you for your past favors, I am,

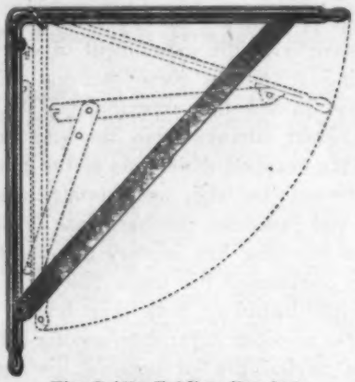
Yours very truly,

THE MICHIGAN RETAIL HARDWARE ASSOCIATION,

A. J. Scott, Secretary.

THE GRIFFIN FOLDING BRACKET.

The Griffin Folding Bracket, made by The Griffin Manufacturing Co. of Erie, Pennsylvania, is described as the only bracket for folding or swinging shelves and the method of its working is seen in the accompanying illustration. This bracket locks automatically when lifted up and can be let down entirely out of



The Griffin Folding Bracket.

the way in an instant. It will readily be seen that such a bracket proves extremely useful in many places where the shelf is not in constant use or where space is limited. The Folding Brackets are made for shelves from 8 to 20 inches wide and the manufacturers state that a pair of any size will easily support 500 lbs.

This bracket is known in the Griffin line as No. 88 and is japanned and packed one pair in a box. Prices and discounts can be obtained by addressing the company at Erie, Pennsylvania. When writing, kindly mention THE AMERICAN ARTISAN.

AKRON ECLIPSE LEVELS.

One of the special features of the Akron Eclipse Levels, made by The Baker-McMillen Co., 13 Bowery street, Akron, Ohio, is found in the fact that all the glasses in these levels are carried on elastic bearings and enclosed in heavy glass tubes, making them practically unbreakable.

These levels are a very desirable line for the hardware dealer to carry in stock and are greatly appreciated by the mechanic, who finds them highly satisfactory and of the most practical character possible.

A catalogue of The Baker-McMillen Co.'s goods, illustrated in colors, will be sent to any dealer on request. When writing, kindly mention THE AMERICAN ARTISAN.

A GOOD show window is a splendid salesman.

The Lightning Rod Business in the Hardware Trade

In the development of the retail hardware business many lines of goods have been added from time to time to the dealer's stock until there are to-day numerous inquiries in every hardware store for goods which a few years ago no retail hardware man would think of carrying. Money is made by the modern retailer out of these added lines, and though rules to cover the entire country can hardly be made, since the demands of one section differ from those of another, there are certain lines that can be recommended to hardware dealers all over the United States as not only suitable but profitable for them to carry in stock.

In recent years many hardware dealers in the middle west have tried the experiment of carrying a line of lightning rods. In some sections this new departure has passed the experimental stage and has proved a great success from the standpoint of the dealer. Handicapped as he was at the outset of such an experiment by the unfortunate history of the lightning rod business, the hardware dealer of reputation and standing has in very many instances succeeded in convincing his trade that it is possible to handle honest lightning rods in an honest way.

Of course opinions differ even among manufacturers as to the advisability of making the lightning rod business a side line of the hardware store, but then opinions differ on every subject under the sun and unanimity on this question is hardly to be expected. The hardware dealers who first made a study of the lightning rod business and then gave it careful attention when they undertook to handle lightning rods, seeing to it that they bought only honest goods and recommending honest workmanship in putting them up, are practically unanimous, however, in their statements that the business is a desirable one and that it pays good profits.

What a Representative Retailer Says.

In an address at the recent thirteenth annual convention of the Ohio Hardware Association at Columbus, Ohio, Mr. George P. Griffin of Albion, Michigan, a representative of the Michigan Retail Hardware Dealers' Association, made the following significant remarks:

> There is a condition that presents itself, gentlemen, before the retail hardware people to-day, that we should take hold of, and that is the lightning rod business. A year ago I attended a meeting of a telephone company in a little town twelve miles from my city. I attended the meeting principally to get acquainted with the farmers, and I went into the store in the town of a friend of mine and saw some lightning rods. I said, "Well, what are you selling?" He said, "Lightning rods," and I gave him the laugh. Well, I came home and went to the Michigan Association meeting in August and found there dozens of hardware people who were selling lightning rods and making money, and I found out since on investgation that one firm in a town had cleaned up net $6,100 in the lightning rod business.
>
> Gentlemen, you can get good lightning rods that will absolutely protect the farmers' buildings, and you are more fortunate in Ohio than in any other state from the fact that on a building properly protected with lightning rods the old-line companies will give you better rates. We investigated the lightning rod business and commenced to sell them on the 11th day of January. I looked around and found lightning rods that I thought were good and I bought 1,000 feet. After I bought it I found that my competitor in a town near me had the same thing and was selling it at such a price that there was practically no margin in it. Then I bought another one that was better, and found the same thing—that it was being sold in a town eighteen miles away. Then I investigated another one and got a county on it—got the western half of Jackson county and the eastern half of Calhoun, and I started out and divided that county among the farmers—got a farmer to canvass for me. Since the 11th day of January my profits have amounted to a substantial sum.
>
> Now the secret of the lightning rod business is to get one on which you have the absolute control of the territory. In the state of Indiana they are all taking hold of it. In the state of Michigan the hardware dealers will clean up $150,000 this year in the lightning rod business.

This is the language, not of speculation but of experience, and is well worth consideration by all hardware dealers who have not investigated the lightning rod business.

No Question About Protection.

There is no longer any doubt of the fact that well-made lightning rods of proper material afford protection against lightning just as surely as vaccination affords protection against smallpox. Indeed while there are many who honestly doubt that immunity from smallpox is secured by vaccination, few men can be found to-day who doubt the protective potentiality of lightning rods, and there are no doubters at all among those who have made a scientific study of the subject.

It is therefore hardly necessary in selling lightning rods nowadays to begin at the beginning and expend time and effort in convincing the prospective purchaser that lightning rods do the work for which they are designed. Only the truth need be told by the honest dealer. He does not have to exaggerate to convince his customer. The sleek, slick individual who formerly bunkoed the farmer into buying a lot of worthless trash called lightning rods, and thereby for many years brought discredit upon the business and disgust to the minds of decent people, is practically a creature of the past. The business is now almost wholly in the hands of responsible persons who handle only honestly made goods, constructed upon scientific principles and sold by honest methods.

The Power of Lightning.

It is well for the dealer in lightning conductors to know something of the havoc that may be wrought by lightning, to be able to discuss its power and effects with possible customers. In fact, in this, as in every other business, the more he knows about the subject

the better. An ordinary stroke of lightning, as estimated by scientists, is of 50,000 horsepower and travels at the rate of 288,000 miles a second. It is claimed that the average electromotive force of a bolt of lightning is about 3,500,000 volts; the current is 14,000,000 amperes and the time of discharge is about one 20,000th of a second.

In such a bolt there is energy equal to 2,450,000 volts or 3,284,182 horsepower. It must reach the earth by the path of least resistance and the object of a lightning conductor is to afford such a path. Conductors properly attached to buildings positively protect them from injury by lightning, and there is abundance of scientific testimony to that effect.

Professor Willis L. Moore, chief of the United States Weather Bureau, said, for instance, in his meteorogical report for 1901: "Few questions have been so thoroughly discussed from practical as well as theoretical standpoints, as that of the certainty of protection afforded by properly constructed lightning conductors."

Another acknowledged authority, Mr. Richard Anderson, F. C. S., F. G. S., says: "It may be laid down as a settled fact that a well-made lightning conductor, properly placed and kept in an efficient state can never, under any circumstances, fail in its action."

This is stronger language than is usually used by scientific men and demonstrates beyond question that there is no longer the slightest doubt of the efficacy of well-made lightning rods, properly erected.

The fire marshal of the state of Ohio, Mr. D. S. Creamer, of Columbus, said in a recent report that investigation of 500 fires in the state of Ohio reported to be due to lightning, proved that not one of all the buildings struck had a modern lightning rod, that is, a rod made within twenty years, since the discovery of electric momentum and inertia.

Nine buildings out of the 500 investigated had rods, but every one of them dated back to the lightning rod crusade of about thirty years ago, when the world had no experience in controlling large loads of electricity, and only one of the nine rods was properly grounded. Fire Marshal Creamer's conclusion is that buildings properly rodded, with well-made, modern rods, are never struck or injured by lightning.

Expert Opinions from Abroad

Scientific commissions and individuals in the four most powerful countries of Europe have investigated the matter of protection by lightning rods at the instance of their respective governments and all the scientific investigators agree in the conclusion that the lightning rods now in common use, run from moist earth over the building and down to moist earth again, with points near the chimney and gables, wholly protect buildings from any ordinary stroke.

A reasonable degree of protection against lightning can be secured by very simple means, and modern science has enabled the manufacturer of lightning conductors to place in the hands of those who will give the subject careful attention, lightning rods that will insure immunity from lightning strokes, if properly applied according to the rules furnished by the manufacturers.

Of course in the case of complex structures and especially those in which there are complications of metal in and about the building, each case must be studied separately and calls for the attention of an expert lightning rod engineer.

In a lecture before the Royal Engineers at Chatham, England, on "The Protection of Buildings from Lightning," Mr. Alfred Hands said recently that hitherto too much importance has been attached to the formation and composition of the conductor and too little to the fact that its efficiency depends almost entirely upon the way in which it is applied. He considered the relative value of various metals for conductors, so far as concerned conductivity and dissipation of energy, to be of trifling importance in comparison with considerations of durability.

Satisfactory Systems Evolved.

Modern American methods of manufacture have aimed to produce a system of lightning rod protection, including the rods, tips, and grounding, that shall prove so satisfactory in use as to remove altogether the bad impression created by the imperfect, unscientific, poorly made, and carelessly applied lightning rods of the unfortunate but unforgettable past. Today manufacturers can supply the trade with lightning rods and lightning conductor systems of proved value, which they can offer to their customers with perfect confidence.

For the purpose of informing the hardware trade of the present conditions and the prospects of the lightning rod business, THE AMERICAN ARTISAN recently addressed to reputable lightning rod manufacturers a series of questions covering points in the business which will undoubtedly interest our readers. By these questions it was sought to bring out the views of the manufacturers as to the desirability of the business from the hardware dealer's standpoint, and the letters printed below will give the retailer who contemplates handling lightning rods many valuable points for his consideration:

A Profitable Line for Anyone.

To THE AMERICAN ARTISAN:

As wholesale dealers in and manufacturers of lightning rods of every description, we take pleasure in replying to your interrogatories as follows:

1. What is the outlook for lightning rods for the ensuing year?

Ans.—It is very encouraging, as there are more parties taking up this line as a side line than ever before.

2. Is the demand for lightning rods increasing and to what extent?

Ans.—The demand is increasing very rapidly, as lightning rods are now coming into general use.

3. What trade condition should, in your opinion, receive special attention at the present time?

Ans.—That trade that takes on a good lightning rod and works it conscientiously in connection with any other business or calling that he may have.

4. What line of rods do you find the readiest sale for?

Ans.—Section lightning rods of the Star variety, galvanized and covered with copper, the minimum size not less than ¾ in. in diameter.

5. Are lightning rod agents as much in evidence as formerly?

Ans.—The lightning rod representative is more in evidence now than ever before, but the character of these representatives is changed to that of a standard equal to any other line of goods that is now offered to the public.

6. What efforts are you making to discredit the work of irresponsible persons?

Ans.—We will absolutely decline to sell to any one taking our goods and working a discreditable business, such as prevailed twenty years ago.

7. What efforts are you making to increase the efficiency of your product?

Ans.—We are using the best materials that can be procured; the highest grade of pure steel and Lake Superior copper. Our "Star" rods are galvanized with the best spelter and block tin, and will not crack or scale in bending.

8. What percent of buildings with lightning rods on are burned by lightning?

Ans.—We have never known a building that was equipped properly with a circuit system of lightning conductors to be destroyed by lightning.

9. What in your opinion is the best material for lightning rods, and how should they be constructed?

Ans.—In our opinion, the best lightning rod manufactured is a rod not less than ¾ in. in diameter, made of steel and galvanized and encased in sheet copper, thus giving a substantial body and a copper surface.

10. Is the lightning rod business a profitable side line for hardware dealers?

Ans.—The lightning rod business is a profitable side line for anyone who will take it up and give it the time and attention that its profit-earning capacity merits.

All of the mutual fire insurance companies and many of the old line companies are now advocating the use of lightning rods where they are carrying risks. Statistics of recent years have proven to their satisfaction that the loss in the rural districts can be eliminated by the use of good lightning rods properly applied.

Edw. A. Foy & Co.

409 & 411 East 8th Street,

Cincinnati, Ohio, April 26, 1907.

Good Business for Hardware Men.

To The American Artisan:

In calling attention to the lightning rod business as a desirable one for hardware dealers to engage in we think you are right in asking for only plain facts from people who should know the most important features for the benefit of the business.

In answer to the question, What percent of buildings with rods on are burned by lightning? we would say, none—with good copper rods properly put on.

Copper is the best material for lightning rods and the larger the surface the better, as the electricity travels on the surface only. For instance a pound of copper would be better in tube form than in solid or cable form. The rod should not be fastened to the building or rest on the roof, as you know lightning is pretty hot sometimes and it has been known to set fire to material it struck. The best plan is to hold the rod off the building about an inch by a partial conductor so as to allow the free escapement of the electric current to the copper rod and thus prevent an explosion.

We have been in the lightning rod business about thirty-five years and during this time we have never known of any building or buildings with good copper rods on being burned by lightning.

We are manufacturers and wholesalers, exclusively, of lightning rods, weather vanes and fixtures of all kinds, and regard the lightning rod business as a profitable side line for the hardware trade, in fact it is the very best we know of. We furnish over four hundred hardware dealers our patent copper tube with the patent ground connection attached, and these hardware firms run wagons for the express purpose of putting up the rods.

The outlook for the lightning rod business for this season is very good. It never was better.

There is a rapid increase in the demand for a good copper tube lightning rod and we are sure that they will be in general use all over the country in a very few years. Now is the time to make money out of them before everyone has them for sale.

The Security Lightning Rod Co.
H. Simpson.

Burlington, Wis., April 26, 1907.

Sell Only Men of Standing.

To The American Artisan:

Your favor is to hand and noted and in answer to your questions we will reply as follows:

1. The outlook for the lightning rod business was never better than at the present time. The demand is not localized, but is general and indicates a general revival of interest in the protection against lightning which can only be secured through a properly constructed and properly erected lightning rod.

2. The demand for lightning rods is constantly increasing. The demands upon us exceed our capacity of production.

3. Continued efforts should be made to educate the public to the value of lightning protection.

4. We sell more Star lightning rods than any other one kind. We are general manufacturers and make a large variety of different kinds of lightning rods. We make all sizes and kinds of copper cables, copper tube rods, Star copper coated rods and Star galvanized rods.

5. Lightning rod agents are as much in evidence now and more so than formerly. Some of these agents follow the business exclusively, while others combine the sale of lightning rods with some other business. Formerly where there were probably one or two men handling lightning rods in a county, in some sections there are now a dozen or more handling this line of goods.

6. We furnish our goods only to men of character and standing in their local community. We have for years fought the cutthroat methods of some of the lightning rod trade.

We are always on the alert to improve and increase the efficiency of our products.

8. The percentage of damage done to buildings protected by lightning rods is practically nothing. This has been fully substantiated by private and government statistics and investigations by insurance companies.

9. There are only two materials that can be used for lightning rods and that is, iron or steel and copper. Good lightning rods can be made out of either one of these metals. A perfectly constructed lightning rod should have an equal conducting capacity from the point throughout the rod to its termination in the earth.

Yours truly,
St. Louis Lightning Rod Co.,
Per H. F. Kretzer, Pres't.

St. Louis, Mo., April 23, 1907.

Says Experts Only Should Handle Rods.

Mr. Carl Bajohr, president of the Carl Bajohr Lightning Rod Works, 4051-4057 Keokuk St., St. Louis, Mo., said in answer to the questions asked by The American Artisan:

"The percentage of buildings with lightning rods on burned by lightning is none whatever. There is no case on record in which a building properly protected was burned; that is, a building protected by continuous copper cable with platinum points and well grounded in earth.

"In my opinion, the only material that should be used for lightning rods is absolutely commercially pure copper cable, in connection with solid bronze screw or anchor fasteners, such as are specified by the United States government; but the main thing is to have platinum tipped points, as all other metals corrugate, oxidize or tarnish. There is no other metal in the market capable of collecting electricity in the open air so well as bright platinum tipped points. Platinum, of course, is expensive, but it is the material to use to insure absolute protection. The new metal, tantalum, would be better still, but its cost is at present prohibitive, being $269.00 an ounce troy. It is not yet used for lightning rod tips, though I believe it will be.

"I don't believe the lightning rod business will be found a profitable side line for hardware dealers, because hardware dealers sell the rods at a small percentage to customers who are not capable of doing lightning construction work in a scientific way. You would not give a butcher the job of repairing your gold watch. The construction and application of lightning conductors is a trade by itself and must be

learned the same as any other trade. Lightning rod construction work should be done only by men in that business and not by any Tom, Dick or Harry.

"The demand for lightning rods is increasing because it looks as if the swindling concerns of the past have been crushed down by public action and the swindlers have been driven out of the business.

"Only experts should be employed in the work of lightning rod construction and only men who understand the business thoroughly should undertake to sell lightning rods. In the past irresponsible agents such as tailors, shoemakers, etc., have been sent out to sell lightning rods without the slightest idea of electrical principles and without being able to give proper advice to the buyer. This is what caused the old trouble in the lightning rod business, added to the fact that it is only within recent years that lightning rods have been constructed on scientific principles.

"The results of investigation will show that no properly protected building will ever be damaged by lightning."

Trade Conditions in Good Shape.

To THE AMERICAN ARTISAN:

Your favor received, and will try and answer your questions to the best of our ability.

1. We never experienced such a rush of business, and the trade seems to be in a good, healthy condition.

2. The demand for lightning rods is surely increasing, but to what extent it is almost impossible to state.

3. Trade conditions are in our opinion now in good shape.

4. We only manufacture pure soft copper cable lightning rods.

5. Not the old style swindler, but the legitimate dealer is more in evidence.

6. We are very careful in selling our goods, and only sell to men who are responsible, and see to it that every one of our men is schooled in the business.

7. We endeavor to increase the efficiency of our product by keeping in touch with all modern improvements, both in machinery for manufacturing and by a thorough study of the scientific principles of protection, and by the employment of expert workmen.

Yours very truly,
MOORE BROS.' LIGHTNING ROD CO.,
J. L. Moore, Sec'y.

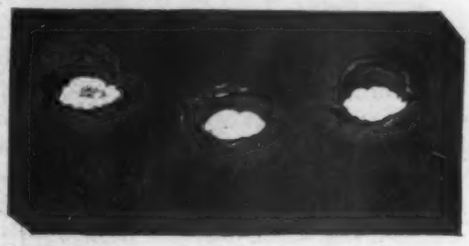
Graham, Mo., April, 1907.

NEW REMINGTON AUTOLOADING RIFLE.

The Remington Arms Company have just placed on the market a new rifle under a name which at once demands attention as showing a development in the manufacture of firearms. It is called the Remington Autoloading Rifle and is designed to fire five shots at lightning speed without any of the old troubles caused by defective working of the lever, an awkward bolt, etc. This new rifle is described as follows: "It has a solid locked breach within which a turning bolt is absolutely locked against the head of the cartridge. The recoil ejects, recoils, cocks and loads the gun and the hunter has only to aim and pull the trigger for each succeeding shot, with all his faculties free for aiming. The rifle is quickly loaded, for the clip system is used, as in modern military arms. Its weight is only 7¾ pounds and it has a light, smooth, trigger pull."

The New Remington Autoloading Rifle.

At present the Remington Autoloading Rifle is furnished in .35 and .30-30 calibers only. The 30-30 Remington Autoloading is equivalent in power to the regular 30-30. The .35 cartridge has a 200-grain bullet with 2,000-foot velocity and muzzle energy of 1,693 foot-pounds, making it a very powerful arm. The appearance of the new rifle is shown in the cut



Penetrated by the New Remington Autoloading Rifle.

herewith and the second illustration shows a piece of machine steel 5-16 of an inch thick claimed to have been thus cleanly penetrated by the new Remington.

Dealers are invited to write the manufacturers at once for the new catalogue describing the Autoloading arm. Address Remington Arms Company at Ilion, New York, or at its agency, 315 Broadway, New York City, and when writing, kindly mention THE AMERICAN ARTISAN.

THE "IDEAL" COOK BOOK.

Every possible help is given by the Toledo Cooker Company, 1300 West Bancroft street, Toledo, Ohio, to dealers who sell the Ideal Steam Cooker. One of these helps is the Ideal Steam Cooker Cook Book, ordinarily priced at 25c, but which for a limited time they will furnish free in quantities to dealers who handle the Ideal Cooker. It is a cook book that will be appreciated by every practical housewife. It contains many special recipes for cooking by steam with the Ideal Steam Cooker, with time tables for steam cooking, etc., and a great deal of general household information in handy form.

A great campaign of publicity for 1907 has been entered upon by the Toledo Cooker Company, in the course of which they say that forty-four million readers will be reached. This is claimed to be the greatest advertising effort ever made on behalf of any kitchen article and means a great deal to the retailer who handles the Ideal Cooker.

Dealers are invited to send for the Toledo Cooker Company's catalogue and descriptive literature, and for a copy of the Ideal Cook Book, in order that they may be convinced that now is the time to begin handling the Ideal Steam Cooker with a view to seasonable summer profits. When writing the company kindly mention THE AMERICAN ARTISAN.

UNIVERSAL SCREEN DOOR CATCHES.

Nothing is more annoying to the householder than a screen door with a catch that does not do its duty. Such a catch when it fails to work and leaves the door ajar is one of the petty annoyances which are numerous enough in the domestic economy without being added to unnecessarily.

The Peck, Stow & Wilcox Company of Cleveland, Ohio, and 27 Murray Street, New York City, offer to the public in their Universal Screen Door Catch an appliance for screen doors which they claim can be absolutely relied upon to do its work properly at all times. This device is made from stamped wrought steel, in old copper finish, and has an automatic friction catch with stop which holds the door firmly shut. It locks from the inside and the makers say it is unequaled for simplicity, strength, durability and convenience. It is easily put on the door, no mortising or cutting being required for either lock or striker. The price is low, in fact the Peck, Stow & Wilcox Company claim it is the lowest priced lock screen door catch on the market. When writing them for prices, etc., kindly mention THE AMERICAN ARTISAN.

Universal Screen Door Catch.

JOS. DIXON CRUCIBLE CO.'S "GRAPHITE."

"Graphite" for April contains the second chapter of a useful article by Mr. W. H. Wakeman on "Feeding Graphite for Lubricating Purposes," also some pertinent quotations from Mr. Chas. E. Duryea, the well-known automobile manufacturer, on the use of Dixon's Graphite as a lubricant for the various working parts of a motor car. Dixon's Motor Graphite and Dixon's Graphite Chain Compound are strongly urged upon the attention of automobilists, and a fine photographic view of the new building of the People's Trust Company, Montague street, Brooklyn, New York, the structural steel work of which is protected with Dixon's Silica-Graphite Paint, occupies the last page and concludes a very interesting number.

The Joseph Dixon Crucible Company's graphite publications are sent free upon request. When writing the company kindly mention THE AMERICAN ARTISAN.

ONEIDA COMMUNITY'S HAMMOCK CHAINS.

Among the numerous specialties of the Oneida Community, Ltd., the manufacture of chains has long been conspicuous and the making of hammock chains, therefore, is a very natural development of the business. These chains, called Niagara Galvanized Hammock Chains, are being extensively featured this season in anticipation of a large summer demand for hammock supports. It is claimed that the chain is much stronger than rope, and that having been actually tested to the weight of five heavy men, the tensile strength of the chain is at least 1,500 pounds. Its safety is, therefore, one of the points emphasized. There is no danger of rust, as the chain is heavily galvanized, and it is said to be very easy of adjustment and to hold firmly without slipping. Dealers are supplied with free samples and attractive hangers for display.

The chains are furnished in three lengths, known as short, medium and long. The lengths are three, six and nine feet respectively. They are boxed attractively, each box containing a single set. The article makes a convenient shelf package. Prices, etc., will be sent any dealer on request. Address The Oneida Community, Ltd., Oneida, N. Y., and when writing kindly mention THE AMERICAN ARTISAN.

RETAIL HARDWAE DOINGS.

NEW FIRMS AND INCORPORATIONS.

Baltimore, Maryland—The Young Hardware Company has been incorporated with a capital stock of $5,000 to deal in hardware.

Taylor, Texas—Witliff Hardware Company, capital stock $33,000.

Harrisonburg, Virginia—Wilton-Nicholas Hardware Company (Inc.) has been incorporated.

Dalton City, Illinois—Wilson Hardware & Furniture Company has been incorporated with $20,000 capital.

Minneapolis, Minnesota—The Western Hardware Company has been incorporated with a capital of $90,000.

Bismarck, North Dakota—G. W. Wolbert Hardware Company, capital stock $50,000.

Harvey, North Dakota—C. H. Blanding Hardware Company, capital stock $20,000.

Newark, Ohio—The Newark Hardware Company has been organized here.

BUSINESS CHANGES.

Gibson, Illinois—The W. R. Jones hardware store was sold to T. J. McMahon.

Storm Lake, Iowa—James Webb has purchased the hardware store of Robert Bleakly.

Odessa, Missouri—Robt. M. Lale has purchased a half interest in the hardware store of R. R. Wickular.

Gas City, Indiana—The Overman Company has purchased the hardware store of Hiatt & Miller.

Saltsburg, Pennsylvania—The hardware firm of J. C. Moore has been enlarged and three new persons have been taken into the business which will be known as the J. C. Moore Hardware & Supply Company.

Danville, Iowa—The hardware firm of Shepherd & Bonnell has been changed to Bonnell & Chandler, Mr. Will Chandler being the new member of the firm.

Wapello, Iowa—Fred H. Hesse and Floyd Patterson have bought the Otto Hardware Company's store here.

Harlan, Kansas—J. C. Weethee has sold his hardware store to F. J. Turner.

MISCELLANEOUS.

Menlo, Iowa—George C. Buckley, dealer in hardware, was burned out.

Cleveland, Ohio—The hardware store of John E. Euchei was destroyed by fire.

Oswego, Illinois—The firm of Updike & Gaylord have sold out their hardware business.

Englewood, Illinois—Wm. J. Ehler has moved to 6102 Halsted Street.

Gilboa, Ohio—James and Joe Smith are going into the hardware business here.

Advertising Department

Our readers are invited to send in copies of their advertisements in the local press for criticism. All communications should be addressed to the "Advertising Department" of THE AMERICAN ARTISAN.

In its original form the advertisement of T. B. Stock & Company of Waukon, Iowa, occupied an eight-inch three-column space in the Waukon Republic. It was

a good advertisement, calculated to interest the housewife and to secure a good attendance during the demonstration to which it refers. It makes a direct appeal to women and goes about it in the right way to secure their attendance. The free offer of a set of cooking utensils to every purchaser of a range during the week of the demonstration was an attractive idea and barring the fact that no address appears in the ad. it was highly commendable.

* * *

The advertisement of I. Bowman, of Berryville, Virginia, reproduced herewith from a local newspaper. is an ad of unusual character in the method of

A full line of **HEATING STOVES** from $1 to $40
A Full Line of the Best **HARDWARE**
A nice line of Guns, Rifles, Ammunition, Etc.
See my line of CUTLERY before buying
I. BOWMAN, Berryville, Va.

its composition and is doubtless open to considerable criticism from those who are or profess to be experts in the use of type for advertising display. As a general hardware advertisement we must confess that we have seen many worse ads than this and we should not be surprised at all to learn that this style of advertising proves effectual in Berryville.

It is possible, however, that if the printer tried again he could do better with the same copy, and Mr. Bowman might do well to vary the wording somewhat from the stereotyped expressions "A full line," "A nice line," "See my line," etc.

Let us suggest that he use the same space but print a short conversational talk to his neighbors—such a line of talk as he would put up to a customer who entered his store—and watch the results.

* * *

The accompanying advertisement of W. N. Bartholomew of Somewhere (address not stated in the ad) shows an example of the use of the Round Oak electrotypes furnished by the Estate of P. D. Beckwith, Inc., Dowagiac, Michigan, for the benefit of Round Oak dealers. The advertisement makes an excellent argument for Round Oaks and is illustrated with an attractive cut showing the famous little Fritz and his Indian mentor Doe-wah-jack in the act of admiring the Flat-

iron building in New York. Such electros can be used by the hardware dealer with great advantage, but something more than the mere name of the dealer should as a rule be added.

* * *

There's the man behind the gun
  Who thus his country serves,
The man behind the throttle
  Keen eyed with iron nerves;
But the man who's most behind
  The one who never climbs,
Is he who will not advertise—
  The man "Behind the Times."

—G. H. Kerr.

Heating and Ventilating

SQUARE POT FURNACES.

The new line of warm air furnaces manufactured by the Boynton Furnace Company contain special new features of great interest to the heating trade and the reasons for embodying these special features in the well-known Boynton line are presented by the company, together with a detailed description of the construction, as follows:

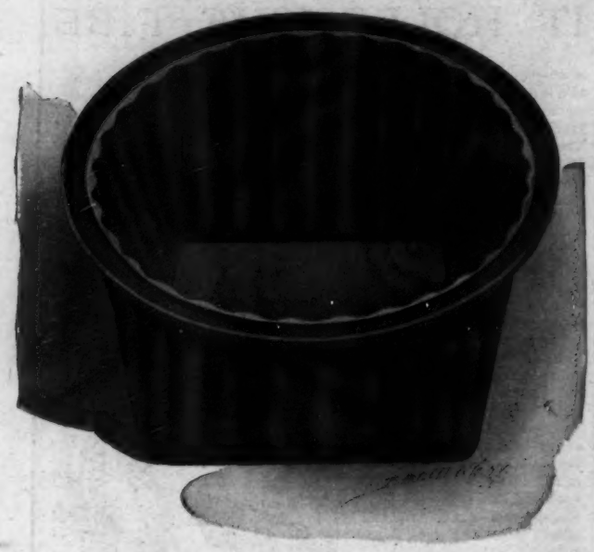
Growing out of the universal use of revolving grates in round pot furnaces there has come a demand that the workable area of such grates shall exactly correspond with the layer of ashes to be removed from the bottom of the fire pot.

Straight grate bars in a round ash pit opening leave at the sides a segment of ashes undisturbed by the grates.

Practically vertical sides of a fire pot are necessary to the effective and complete removal of ashes.

A round fire surface is desirable for uniform burning.

The Boynton square pot furnaces in the relation of their



The Boynton Square Fire Pot.

bases, grates and fire pots, perfectly meet all of the above conditions.

Fire Pots.—The upper portion of the pot being circular, and the bottom square, the effective grate area is 25 per cent more, and the effective radiating surface of the fire pot 10 to 15 per cent more than in any other furnace made of equal diameter of fire pot.

Grate.—The Boynton triangular bar is the best type of the clinker smashing, ash cutting, easy operating triangular grate. The bars of equal length and motion rotate in pairs, and absolutely prevent the accumulation of ashes above the sides of the square pot and underneath the center of the grate.

The cog gearing, being placed well forward, is not affected by the heat of the fire or deposits of ashes.

An important requirement in the operation of triangular grates is that after shaking they be left with their flat surfaces and not their points uppermost; otherwise they will not support the fire, and are liable to be burned out. The patented "clutch" applied to all Boynton Triangular Grates engages the end of the shaker as soon as the flat surfaces of the bars are turned from a horizontal position and insures the impossibility of removing the shaker until the bars are in the correct position.

Ash Pit.—An ordinary coal scoop will remove all ashes from the square ash pit, no possibility of ashes banking in the center of the back of the pit.

Square Pot New Gas Tight Furnace.—It is entirely of cast iron; the two parts usually most susceptible to the effects of the fire, viz., the fire dome and radiator, are solid core castings, and no parts of this heater in contact with the gases of combustion are put together with bolts or rivets; it is gas tight during its lifetime. It has the greatest amount of effective radiating surface in proportion to grate area of any furnace made. The relation between the flue travel of gases and extent of radiating surface is such as to insure the greatest efficiency for the fuel consumed, i. e., the greatest economy.

There are no horizontal surfaces in its radiator flues for the lodgment of soot and ashes; it is practically self-clearing.

The radiator is adjustable to any position of the smoke pipe—a matter of much importance in the adjustment of the heater to varied arrangements of flues.

Square Pot Steel Dome Furnace.—Is the best example of the down draft type of wrought metal furnace in the market.

This form of furnace has the advantage of an unusually large combustion chamber, which presents to the air in circulation a great area of direct heating surface. Very extensive additional radiating surface is comprehended in the two down-take flues at the side, the "horseshoe" flue at the bottom and the up-take flue at the back; through all of which the hot gases of combustion must pass when the direct draft damper is closed.

The wrought metal work is made of heavy gauges of the best steel plate, with the most thorough workmanship, leaving no possibility of a leakage of gas.

Square Pot Crusader Furnace.—With cast iron or steel plate return flue radiators is the best type of the return flue radiator furnace now on the market.

The body, with extra large mouthpiece, fitted so that a coil may be easily inserted, obviates the necessity of drilling the furnace at a future time, should a water-back attachment be desired for heating water for domestic purposes.

When it is desired to use bituminous coal for fuel it is specially constructed with air injectors and heavy cast iron return flue radiator (cast in one solid piece, with direct and indirect drafts).

It has a wide and favorable reputation as a successful soft coal burner.

The extra large combustion chamber directly over the fire in both the steel plate and cast iron radiators, is of heavy cast iron, affording a measure of durability far superior to the sheet iron construction at this point common to so many furnaces.

The clean-out cap of the radiator is independent of the ornamental front, and the radiator may be turned around to accommodate any position of the smoke-pipe, and not confined to a back outlet as with all high front furnaces.

The Square Pot Admiral Furnace has a large combustion chamber for the expansion of gases and an extraordinary area of radiating surface exposed to contact with entire volumes of hot gases; the products of combustion not being divided, but carried as a whole throughout the entire flue extent of the radiator.

Connection of the smoke pipe may be made at either side by reason of the interchangeable flue plate and smoke and clean out collars.

In burning wood during any part of the season the double and independently hung feed doors provide an opening adequate for large pieces of wood.

The wrought metal of the radiator is reinforced with cast iron at the point of severest action of the fire.

The structural form of the radiator is such that the large amount of radiating surface which it comprehends is afforded by a large diameter, while its height is kept well within the opening of an ordinary door, and the entire height of the furnace is such as will adapt it to a very low cellar.

The Boynton "Champion" Wood Furnace retains the salient structural features of the earlier patterns and embodies in its present form a number of very desirable improvements.

The Revertible Flue Radiator of heavy steel plate has

a great extent of heating surface and its flue construction provides for the complete travel and distribution of the products of combustion.

It is provided with clean outs at both ends, rendering the task of cleaning out the radiator a very easy one.

THE FEED DOOR is of very ample dimensions, contributing to ease of handling large and heavy wood.

A HEAVY GRATE extends nearly the whole length of the fire chamber, and by means of air admitted through the ash pit below this grate, combustion is as good at the back as at the front of the fire chamber; a better regulation of the fire is also possible.

THE CORRUGATED FORM of the body and dome gives the maximum of strength and heating surface.

THE UNUSUAL WEIGHT of this furnace, coupled with a form of construction which has been extensively imitated by other makers, is a sufficient guarantee of its excellent qualities.

In presenting the above line of warm air furnaces to the public The Boynton Furnace Co., of Nos. 207-209 Water street, New York, and Nos. 147-149 Lake street, Chicago, bespeak for them from the dealer a careful consideration of their merits, believing that a line of furnaces which combine so many good points of novelty and originality of design with a degree of ease and economy in operation will appeal to every practical-minded dealer who is seeking the best for himself and his customers.

The new Boynton catalogue will be sent to dealers on request. When writing the Boynton Furnace Com- kindly mention THE AMERICAN ARTISAN.

THE PECK-HAMMOND COMPANY CONTRACTS.

Contracts for heating and ventilation have been awarded recently to The Peck-Hammond Co., of Cincinnati, Ohio, as follows:

Delaware, Ohio—Contract at $3,305, for the heating of the annex to the high school by a fan furnace system.

Myersdale, Pa.—Contract for the heating of the high school building by steam blast system of heating and ventilation at $5,500.

Cincinnati—Contracts for the heating and ventilation of the Oyler school at $14,000, the Central Fairmount school at $18,459, and the Twenty-second District school at $16,899. All the above will be steam blast systems.

New Orleans—Contract at $1,500 for the heating of the First Baptist Church by fan furnace system of heating and ventilation.

FRONT RANK FURNACES.

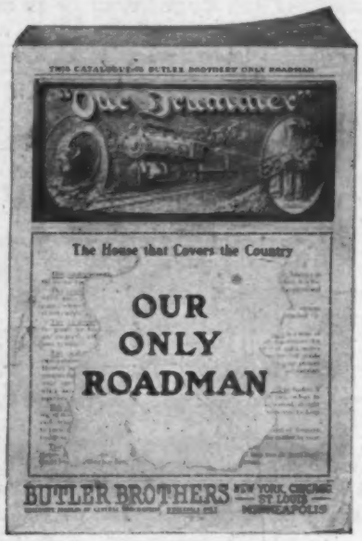
The Haynes-Langenberg Manufacturing Company of St. Louis, Missouri, invite dealers and furnace men to write them with regard to an agency for their Front Rank Warm Air Furnaces, which, the makers say, have always stood for honest value. In construction, the Front Rank Furnace is simple and effective. It has large heating capacity and users are reported to find it eminently satisfactory in every respect. It is designed to burn either wood or coal, is made to last and to accomplish its heating purposes with the least trouble and inconvenience to the purchaser.

The Haynes-Langenberg Manufacturing Company are confident that furnace men who become Front Rank agents will surely increase their business. The company's complete catalogue will be sent on request.

"OUR DRUMMER" FOR MID-SPRING.

The successive issues of "Our Drummer," which Butler Brothers of New York and Chicago call their "only roadman," have come to be looked forward to by the retail merchant in full confidence that each issue will contain a number of new things in all departments with which his store and his stock can be freshened up. The cover pages are always replete with clever material that demands attention from even the busiest man, and every retailer is benefited by looking them over. The advice given is so valuable, the hints and suggestions are so practical and so evidently based upon actual experience and conditions of business, that it becomes not only a pleasure but a privilege to peruse them.

In the issue just out for Mid-Spring, 1907, Catalogue No. 611, Butler Brothers point out that nearly



every page of this book contains goods that in a retail store are classed as notions, and they suggest to the retailer practical means whereby the display of these notions, used as leaders, will aid in selling seasonable things from heavier stock. Butler Brothers say: "Draw folks into your store by irresistible offers of little things in every-day demand right now."

The prices in the new catalogue went into effect April 29, and supersede all others until Butler Brothers' June catalogue is out. Retailers overlooked in the distribution of "Our Drummer" can obtain a copy on request. When writing Butler Brothers kindly mention THE AMERICAN ARTISAN.

PARAGRAPHS.

The Peck-Hammond Co., Cincinnati, Ohio, have been compelled to increase their office and salesrooms to meet their rapidly increasing business. In addition to their 124 Pearl street they have added 126 and 128, which is a massive five-story structure, 38x70 feet.

Henry & Scheible Co. of Cleveland, Ohio, are preparing to place on the market a new line of side wall registers of cast iron and steel construction. Cuts of the new register will be ready in a few days, and the manufacturers have promised that this is to be one of the most desired lines of registers.

Tinshop

ANOTHER REPLY TO BROTHER JOHNSON.

To THE AMERICAN ARTISAN:

In reply to the inquiry of Brother E. M. Johnson, in your April 13th issue, asking for a pattern for a flaring oval pan of given dimensions, I am pleased to give him a very simple and easily applied method.

Nearly every tinner has a rule for the "oval pan pattern" which is in some respect or other different from the method used by nearly every other tinner. And yet they are all alike in this one respect, that the development of the body pattern is obtained by combining two sets of conic sections.

As the pan is to be 12 inches wide and 16 inches long on the bottom, we will draw A B, Fig. 1, 16" long, bisect it at O, and through O and at right angles to A B draw C D 12" long. With O as center and

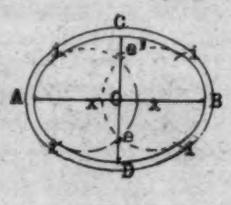


Fig. 1.

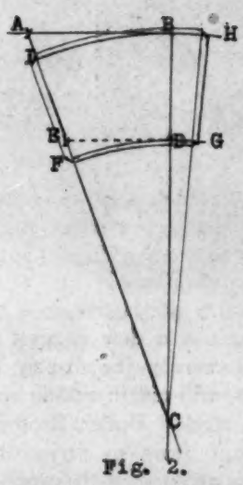


Fig. 2.

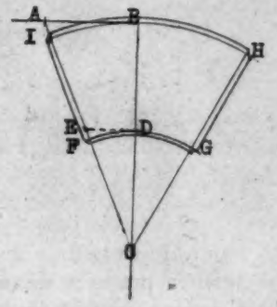


Fig. 3.

radius equal to ¾ the difference between the two diameters, in this case 3", mark the points x x. With these points as centers describe the two circles with radius x A or x B. Then with A and B alternately as centers mark the little arcs i i i i same radius. Next measure the distance from point of intersection O to point where one of the circles crosses the major diameter, and set it off on the short diameter from C and D in towards the center O. (If we were drawing a more elongated oval so that the circles did not cross the short diameter, the distance from O to the point of crossing the long diameter would be transferred to extensions of C D outside the points C and D.) These points marked e e′ give the correct radius for the side arcs. Draw the side arcs with radius e to C and e′ to D, which completes the bottom.

Make the allowance for double seam outside the oval, here shown very much exaggerated as the correct proportion would hardly show in so small a drawing.

Now to make patterns for the body in 4 pieces, draw A B C, Fig. 2, around the corner of steel square indefinitely, and from B towards C set off the depth of pan, 10" from B to D. Draw D E parallel to A B and equal in length to the radius of the side arcs of bottom, e C and e′ D, Fig. 1. And on A B measure out from B the same distance as D E plus the desired flare, in this case 4 inches. In all cases make A B just the required flare longer than D E. And draw a straight line through A and E and continue till it intersects B C at C. Then with C as center and radius C B describe an arc from line A C across B C indefinitely, and with same center and radius C D strike a parallel arc through D.

Step off or measure with a bent strip of tin, the arc i C i or i D i, Fig. 1, and transfer the length to the arc last drawn through D, shown from F to G. Then draw a line from C through G, intercepting the larger arc at H. and F G H I will be the pattern for one side, except that allowance must be made for the wire at top, locks at ends and seam at bottom.

The end pieces are obtained in the same manner, only using the radius of the end circles in Fig. 1 for the distance D to E of Fig. 3. Then add to it the 4 inches flare for the length of A B and draw A C through E to C as described and illustrated. And with C as center draw the arcs F G and I H. Then measure or step the end arc i A i or i B i and apply it to F G. Draw from C through G to H, add the allowances as before, and the end pattern is complete.

Cut one more of each, groove together, wire and form up to the shape of bottom, and if the work has been carefully done you will have a pan of very nearly accurate shape—much better than many I have seen made by a much longer method.

H. E. OSBORNE.

Salt Lake City, April 21, 1907.

GALESBURG KNOCKED-DOWN SKYLIGHTS.

The Galesburg Cornice Works of Galesburg, Illinois, are manufacturers of many styles of skylights which they furnish in "knocked down" form, easy to set up when received from the makers.

1. Crate for Shipment.

In the first illustration herewith there is shown one of their skylight frames knocked down and crated for shipment. The size of the skylight is 6 x 8 feet. The dimensions of the crate are 8 feet 6 inches long, 3 feet

2. The Metal Frame.

6 inches high, and 6 inches thick. It travels safely anywhere at a low freight rate.

The second illustration shows the metal frame of the skylight in four pieces, ready to be bolted together

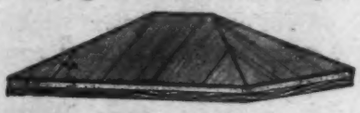
on the hips and ridge, with condensation gutters, caps and cleats to hold glass in place. Quarter-inch ribbed glass securely packed in a separate box is shipped with the skylight.

In the third cut the metal frame is seen in place on the curb. Curbs are usually made of 2 x 6 wood leveled on top and flashed up on the outside with tin or

3. In Place on the Curb.

other roofing material. The metal frame of the Galesburg Cornice Works' skylights slips over the flashing and in ordering these skylights measurements should be given on the outside of the wood curb and flashing.

In the last illustration the complete skylight is seen in place. The Galesburg Cornice Works furnish frames of any size to fit old or new curbs. A booklet entitled "Let There Be Light," gives complete information upon skylights and the makers point out that



4. Complete Skylight.

while their skylights are shipped in parts, no skill is required to erect them and no special tools, soldering or puttying is needed, a screwdriver being the only tool required in setting up the skylights. A copy of this booklet will be sent on request. Address Galesburg Cornice Works, 14 East Ferris street, Galesburg, Illinois, and when writing kindly mention THE AMERICAN ARTISAN.

PRESENT PRICES FOR COPPER.

An official of the United Metals Selling Company, the leading metal dealers of the East, is quoted as follows on the subject of the present prices of copper metal:

"I see nothing in the situation at the present time, nor do I apprehend any developments in the near future, calculated to reduce the price of copper. At the moment we are making but few sales, but this is natural, as consumers are fairly well supplied for the time being, although they are carrying nothing like normal stocks of the metal. This is true of manufacturers on both sides of the water. They think they can foresee a prospective cut in the price and are in consequence ordering as little as possible.

"At the present time there is not an available visible supply abroad of over 5,000 tons of good copper!

"For the first time in the history of the copper industry we were unable in the month of January to promptly keep up our deliveries. This was also true in February and March, and we are only now beginning to catch up.

"Since the first of the year Europe has not taken from America within 18,000,000 pounds of the amount taken in the corresponding period a year ago. This does not mean that Europe is not consuming as much, but means that the foreigners believe it will pay to hold off a little longer.

"About the first of May a large accumulation of deferred orders will probably come into the market but the buyers will have to pay full prices.

"I see nothing in the general business situation on which to base expectations of a smaller demand for copper. There is a good deal of talk, but I notice business keeps up at the maximum."

ALUMINUM COATED SHEETS.

The Aluminum Coated Sheet Steel manufactured by the American Aluminum Coated Company is designed for special use where other metals will not "stand up." In other words, as the makers say, it is designed to take the place of tin, copper and galvanized iron for special purposes. The sheets are claimed to have the rust-proof qualities of aluminum, the wearing qualities of copper and a first-class body of steel, a combination which it is said puts aluminum coated sheets in a class by themselves.

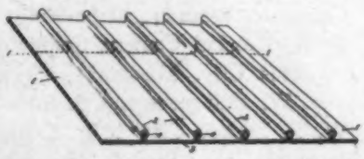
The distributors are The W. J. Burton Company of Detroit, Michigan, who have just issued an interesting illustrated card on which Aluminum Coated Sheets are represented as just coming in through a door marked "Entrance," while older rival materials are passing out through a door marked "Exit."

Detailed particulars regarding Aluminum Coated Sheets will be cheerfully forwarded to those interested by The W. J. Burton Company on request. When writing, kindly mention THE AMERICAN ARTISAN.

BUILDING-SHEET PATENT.

A patent, No. 851,343, has been awarded to William L. Caldwell, Canton, Ohio, assignor to The Berger Manufacturing Company, Ohio, for a new building sheet, the claims allowed being as follows:

Claim.—1. An improved building sheet consisting of metallic and non-metallic members, the metallic member provided with folds or ridges bent from the body of the metallic member and the non-metallic member located upon one face of the metallic member, the folds of the non-metallic



Berger Patent Building-Sheet.

member bound in the folds of the metallic member, substantially as and for the purpose specified.

2. An improved building sheet consisting of metallic and non-metallic members, the non-metallic and metallic members provided with folds or ridges, the folds of the non-metallic member locked in the folds of the metallic member, substantially as and for the purpose specified.

3. A building sheet consisting of metallic and non-metallic members, said non-metallic and metallic members provided with ridges or folds, the non-metallic and metallic folds located around binding wires, substantially as and for the purpose specified.

4. A building sheet consisting of metallic and non-metallic members, said non-metallic and metallic members provided with ridges or folds, the non-metallic and metallic folds located around binding wires, and the non-metallic folded or ridged portions located upon the wires, substantially as and for the purpose specified.

ECLIPSE NESTED STOVE PIPE THIMBLES.

The Eclipse Nested Stove Pipe Thimbles, manufactured by Stuber & Kuck, of Peoria, Illinois, are made of galvanized iron in sizes of five, six and seven inch. It is a convenient thimble for the dealer to handle and the mechanic to use. The makers claim for it that it is stronger than a hand-made riveted thimble and saves 80 per cent of the room required to carry other thimbles.

It is made with a lug which is always on top and when in use passes through two slots and is then tied. It does not interfere with the entering stove pipe and the thimble is always ready to be hooked together.

Stuber & Kuck are manufacturers of pierced tinware of various kinds and all styles of flour sifters. They will send descriptive literature covering all their products, with prices, etc., on request. When writing kindly mention THE AMERICAN ARTISAN.

NOTES AND QUERIES.

"UP-TO-DATE" MANURE SPREADER.

From J. M. Pratt, Colfax, Illinois.

Where can I get repairs for the "Up-to-Date" manure spreader?

Ans.—The "Up-to-Date" manure spreader is manufactured by the Cedar Rapids Implement Works, Cedar Rapids, Iowa, who can doubtless furnish repairs.

TRIMMINGS FOR OIL CANS.

From Pierce & Laux Mfg. Company, Burlington, Iowa.

Where can I purchase trimmings for one and two-gallon oil cans such as spouts, ears and handles?

Ans.—Berger Brothers Company, 237 Arch street, Philadelphia, Pennsylvania; L. D. Berger, 59 N. 2d street, Philadelphia Pennsylvania.

SEWER PIPE AND FITTINGS.

From H. L. Asemissen & Sons, Plattsmouth, Nebraska.

Please advise us where we can get sewer pipe and fittings to best advantage in carload lots.

Ans.—American Clay Products Company, Chamber of Commerce building, Chicago; Blackmer & Post Pipe Company, Wainwright building, St. Louis, Missouri; C. A. Brocket Cement Company, 121 W. 8th street, Kansas City, Missouri; Chicago Sewer Pipe Company, W. 18th place and S. Rockwell street, Chicago; W. S. Dickey Clay Mfg. Company, Kansas City, Missouri; Iowa Pipe & Tile Company, Des Moines, Iowa; Laclede Fire Brick Mfg. Company, St. Louis, Missouri; N. A. Williams Company, Chamber of Commerce building, Chicago.

TANK REFRIGERATORS.

From J. J. Brislow, 311 Broadway, Frankfort, Kentucky.

Where can I get tank refrigerators like the Alaska Refrigerator Company used to make?

Ans.—Belding-Hall Mfg. Company, Belding, Mich.

ITEMS.

The can manufacturing plant of the American Can Company at Lubec, Maine, was destroyed by fire April 22, with loss of $250,000.

The Geological Survey of Canada reports the production of copper in Canada (in tons of 2,240 pounds) as follows: 1906, 25,459; 1905, 21,249; 1904, 19,186; 1903, 19,057.

The American Sheet & Tin Plate Company is operating practically every sheet mill it controls, including the four new mills which it has just started at the Vandergrift works. This gives it a total of 186 sheet mill in operation, using the corporation's system of figuring, which considers the Mercer mill, at Sharon, Pa., as a 14-mill plant.

A very practical and hence valuable article on "Show Window Dressing," from the pen of Mr. Adolph G. Droegkamp, of Milwaukee, Wis., prize winner in our recent Window Display Competition, illustrated with a seasonable display of paints, etc., just made by the author, will appear in THE AMERICAN ARTISAN of May 11.

A contract has been awarded for the erection of a $22,000 addition to the factory plant of the Aluminum Manufacturing Company of Two Rivers, Wis., work to be rushed to completion this spring. The structure will be 60x160 and will be built to the south end of the present plant on Adams street. It will be a two story structure, constructed of reinforced concrete and fireproof.

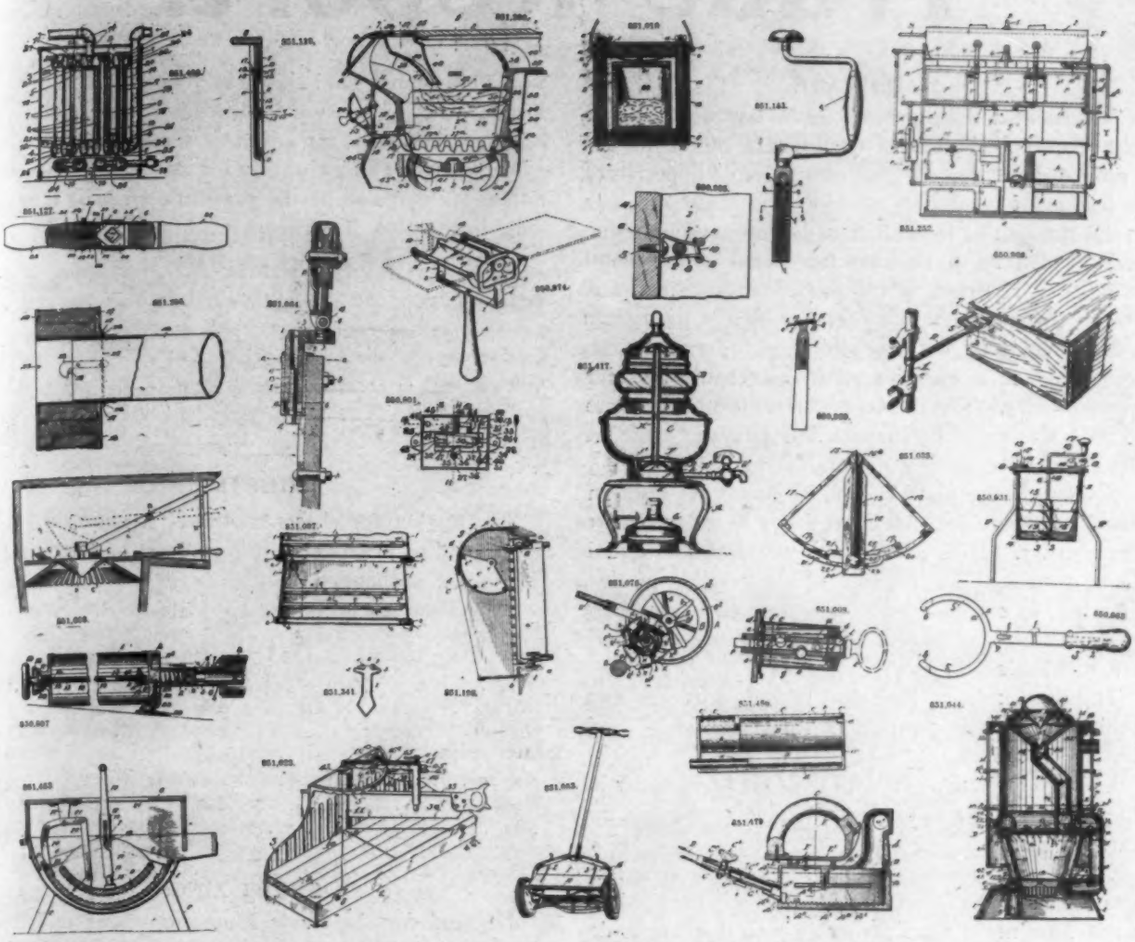
Many of the tin mines in Wales have become the property of English investors from all parts of the country, and America is now coming forward. It is stated that an American syndicate, with a capital of half a million pounds sterling, proposes to work a large group of mines with the most up-to-date appliances, and to erect a large smelting establishment in Marazion, Cornwall.

The Republic Metalware Company announce their removal from their former address, 21 Cliff street, New York City, to 88 Warren street, where they will maintain an office and salesroom. The company has leased the entire top floor, 600x75 feet, of Bush Model Factory No. 2, South Brooklyn, where they will carry a largely increased stock for the convenience of dealers in the New York district.

An officer of the National Enameling & Stamping Company says that when its fiscal year ends on June 30, it will prove to have been the most profitable in the company's history. He says the gross sales are fully $1,500,000 greater than in 1902, which was the company's banner year. It is too early for an accounting of the profits for the present year, but to make a record they must exceed $1,988,428, made in 1902.—The American Metal Market.

The Bureau of Manufactures, Washington, D. C., reports that a mercantile firm whose name it will furnish on request has a sample set of brass dishes which purport to be the table dinner set of a Korean gentleman. The concern writes to the Bureau of Manufactures that it has a tentative order for 50 sets of these dishes to be made in aluminum, and desires to hear from manufacturers in the United States who would be interested in supplying them. The sample set weighs about 15 pounds, and consists of 15 pieces, each with a tight-fitting cover. The firm in question states that it will submit samples and details to any manufacturer interested.

NEW PATENTS.



850,891—Lock. Herman Ahrend, Newark, N. J. Filed June 26, 1906. Serial No. 323,472.

850,897—Soldering-Iron. Henry Berg, Orange, N. J. Filed Mar. 2, 1906. Serial No. 303,752.

850,929—Safety Razor. Franz J. Halbekann, Solingen, Germany, assignor to the firm of Wolferts & Co., Landwehr, near Solingen, Germany. Filed Dec. 4, 1906. Serials No. 346,244.

850,931—Strainer and Sifter. Marie P. Hoffman, Canajoharie, N. Y. Filed Dec. 19, 1906. Serial No. 348,587.

850,935—Screen-catch. Frederick K. Huber, Celina, Tex. Filed Aug. 27, 1906. Serial No. 332,238.

850,968—Combined Box-opener, Nail-puller, and Hammer. James L. Riley, Xenia, Ill. Filed Mar. 12, 1906. Serial No. 305,700.

850,974—Stropping-machine. Elmer C. Shaver, New York, N. Y. Filed Jan. 5, 1906. Renewed Feb. 28, 1907. Serial No. 359,743.

850,983—Plate and Pan Lifter. William F. Valiquette, La Crosse, Wis., assignor of one-half to Allen M. Short, Medford, Ore. Filed June 23, 1906. Serial No. 323,064.

851,008—Safety-lock. Alfred Jacobson and Emanuel A. Svensson, Stockholm, Sweden. Filed May 11, 1906. Serial No. 316,382.

851,018—Cooking Apparatus. William F. Mills, South Bend, Ind. Filed Sept. 30, 1905. Serial No. 280,812.

851,023—Miter-box. Robert L. McCartney, Ottumwa, Ia. Filed Mar. 15, 1906. Serials No. 306,250.

851,035—Tool for Molding Cornices. Harry E. Sharp, Rockville, Conn., and Louis Kentana, Brooklyn, N. Y., assignors of one-third to George Ulrich, Hartford, Conn. Filed Feb. 5, 1906. Serial No. 299,535.

851,044—Heating Stove. John A. Tynan, Indianapolis, Ind. Filed Mar. 6, 1905. Serial No. 248,577.

851,053—Sharpening-tool for Lawn-mowers. William H. Aston, Windsor, Ontario, Canada, and William W. Morrison, Detroit, Mich. Filed May 4, 1906. Serial No. 315,154.

851,064—Door-hanger. John H. Burkholder, Ashland, Ohio, assignor, by direct and mesne assignments, to William V. B. Topping, Ashland, Ohio. Filed Nov. 20, 1905. Serial No. 288,309.

851,075—Lawn-mower. Shadrach M. Dobson, Portland, Me. Filed May 18, 1905. Serial No. 260,982.

851,097—Sheet-metal Packing-case. Alfred T. Kruse, Defiance, Ohio, assignor to the American Steel Package Company, Defiance, Ohio, a Corporation of Ohio. Filed Sept. 20, 1905. Serial No. 279,262.

851,110—Washboard. Andrew Wiss, Cleveland, Ohio. Filed Dec. 13, 1906. Serial No. 347,624.

851,127—Auger-handle. George P. Frank, Elizabeth, N. J. Filed May 19, 1906. Serial No. 317,755.

851,181—Magazine-socket Nut-wrench. Alden L. McMurtry, New York, N. Y. Filed Dec. 11, 1906. Serials No. 347,388.

851,198—Attachment for Hot-air Registers. John M. Dietz, Carl W. Anderson, and John W. Farrell, Salt Lake City, Utah. Filed Feb. 12, 1901. Serial No. 47,045.

851,252—Cooking Apparatus. George R. Prowse, Montreal, Quebec, Canada. Filed Nov. 17, 1905. Serial No. 287,878.

851,280—Stove. Benjamin W. Dodson, Geneva, Ill. Filed July 3, 1906. Serial No. 324,572.

851,298—Stovepipe Joint. Samuel T. Mickey, Winston Salem, N. C. Filed May 8, 1906. Serial No. 315,800.

851,341—Safety Razor. Herbert A. Bullard, San Francisco, Cal. Filed Sept. 18, 1905. Serial No. 278,916.

851,400—Heating Apparatus. Daniel J. F. Buck, Chicago, Ill. Filed Aug. 16, 1905. Serial No. 274,416.

851,417—Coffee-urn. Joseph Heinrichs, New York, N. Y. Filed Jan. 15, 1904. Serial No. 189,137.

851,453—Washing-machine. Charles Stoner, Syracuse, Kans. Filed Apr. 6, 1906. Serial No. 310,362.

851,479—Sad-iron. James E. Austin, Binghamton, N. Y. Filed Sept. 7, 1905. Serial No. 277,394.

851,486—Gas-burner for Stoves. John Bennett, Huntington, W. Va. Filed May 22, 1906. Serial No. 318,251.

851,608—Grate. Harry F. Rasor, Barberton, Ohio. Original application filed Feb. 26, 1906, Serial No. 303,046. Divided and this application filed Feb. 4, 1907. Serial No. 355,671.

Trade Report.

HARDWARE.

Seasonable activity prevails in the hardware market, with every prospect of a continuance of the present strong demand for all lines of staples and specialties. A feeling of confidence pervades the trade and adds to the strength of the situation. Prices continue strong and the volume of business transacted in the month of April is reported by the jobbers to have exceeded that of the same month a year ago by a large margin.

Manufacturers continue behind on orders and some inconvenience is experienced by merchants in securing deliveries. The shortage of steel is a prime factor in the situation and transportation delays in some sections are still causing considerable annoyance.

Stocks of wire nails in jobbers' hands are light and there is a great demand for delivery in all sections of the country. Mills are several weeks behind and in some cases will not promise delivery inside of three months. In cut nails, while new business is not heavy, specifications are of considerable volume and mills are still behind on orders.

Manufacturers of barb and smooth wire are away behind, with little prospect of early success in catching up on orders.

Chicago quotations on wire nails are $2.15 in car lots to jobbers and $2.20 to retailers, plus 5c for less than carload lots.

North and South jobbers' reports are practically unanimous to the effect that conditions in the hardware trade were never more favorable than they are to-day.

TIN PLATE.

The market for tin plates continues strong under a heavy demand. Mills are working to their full capacity and have sufficient business on their books to keep them busy for months to come. Prices of raw material are high and mills are experiencing great difficulty in securing supplies. Premiums are easily obtainable for prompt shipment. Present prices are firmly held at $4.09 for 100-lb. coke plates f. o. b. Pittsburgh. Prices f. o. b. Swansea for tin plates are 14s 10½d.

American coke tins, I. C., from store, New York:	
Bessemer steel, 107 lbs., 14x20	4.55@4.60
Bessemer steel, 100 lbs., 14x20	4.40@4.45
Bessemer steel, 95 lbs., 14x20	4.30@4.35
Bessemer steel, 90 lbs., 14x20	4.20@4.25
Am. charcoal ternes, 8-lb. coating—	
Worcester grades, 14x20, 107 lbs	4.50@4.55
Worcester grades, 14x20, 100 lbs	4.35@4.40
Worcester grades, 20x28, 200 lbs	8.25@8.30
For prompt shipment f. o. b. mill—	
Coke tins, 14x20, I. C	4.05@4.10
Coke tins, 14x20, 100 lbs	3.90@3.95
Coke tins, 14x20, 95 lbs	3.85@3.90
Coke tins, 14x20, 90 lbs	3.80@3.85
Charcoal terne, 20x28, I. C	7.50@7.55
Charcoal terne, 20x28, 200 lbs	7.20@7.25

Usual differences for odd sizes and weights.

COPPER.

There was considerable excitement in the London copper market during the week, due to the decrease in stocks of copper, and this was reflected in the New York market by a rising tendency in prices, quotations being marked up to 24¼@24½c for electrolytic, 25@25¼c for lake and 23@23¼c for casting. These quotations are nominal, however, as little business is being done in the New York market.

Extreme fluctuations for this year:

	Highest.	Lowest.
Electrolytic copper, spot	25½	23½
Lake copper, spot	25¾	24
Casting copper, spot	24⅞	22½
London, spot	£110 15 0	£ 91 15 0
London, futures	112 0 0	93 10 0
London, best selected	118 0 0	107 0 0

SHEETS.

The market for sheets continues strong with mills far behind on orders and little prospect of catching up. Prices are unchanged.

The following prices are for 500-bundle lots and over, f. o. b. mill:

		Galvanized	
Gauge.	Net.	Net.	List.
No. 30	2.85	4.25	21
No. 29	2.75	4.00	19
No. 28	2.60	3.75	17
No. 27	2.50	3.55	16
Nos. 25 to 26	2.45	3.35	15
Nos. 22 to 24	2.40	3.15	14

SHEET ZINC.

Demand for sheet zinc continues strong and much business is being done at the recently advanced prices. The commodity is firmly held by leading producers at $8.60 per 100 pounds, f. o. b. smelter, with 8 per cent discount. There is no charge for extras.

MERCHANT BARS.

The market for iron bars shows a somewhat improved condition and there have been some good sales reported for delivery during the next two or three months. Prices, however, are unchanged on the basis of $1.84½@1.89½, tidewater. Pittsburgh reports new business still heavy and specifications coming forward in good volume. Prices are $1.80, f. o. b. Pittsburgh, with premiums obtainable for reasonably prompt delivery.

Steel bars are in very active demand, with specifications and new business of large dimensions. Quotations are unchanged.

PIG IRON.

The demand for pig iron continues very strong. A good buying movement has set in and sales of all grades for delivery during the last half of the year are large. A continuance of the present demand for a short time will leave very little iron available for third-quarter delivery, and it is said that several large Eastern consumers are still short on their requirements, not yet having covered for the last half of the year. Three large buyers in the Buffalo section, it is said, will

shortly be in the market for 50,000 tons.

There is a good demand for spot with little offering but foreign iron, which is taken in small lots with considerable eagerness. Middlesborough iron sells in New York at $21.50 ex-ship and Scotch iron at $24.50. Large contracts for imported iron have been placed, one firm in New York having ordered, it is said, to the extent of 50,000 tons. Indications that pig iron will reach $26 before the present era of high prices passes are very strong. This price was the high water mark reached in 1899.

A leading Southern jobber is now asking $22 for No. 2 foundry f. o. b. Birmingham for delivery during the last half of the year. It is regarded by many good authorities as inevitable that prices will go higher.

Lake Superior charcoal	$26.50@27.00
Northern Foundry No. 1	24.50@25.00
Northern Foundry No. 2	24.00@24.50
Northern Foundry No. 3	23.50@24.00
Northern Scotch Foundry	24.50@25.00
Ohio Strong Softeners No. 1	23.80@24.30
Ohio Strong Softeners No. 2	23.30@23.80
Southern Foundry No. 1	23.85@24.35
Southern Foundry No. 2	23.35@23.85
Southern Foundry No. 3	22.85@23.35
Southern Foundry No. 4	22.35@22.85
Southern No. 1 Soft	23.85@24.35
Southern No. 2 Soft	23.35@23.85
Southern Gray Forge	21.85@22.35
Southern Mottled	21.35@21.85
Malleable Bessemer	24.00@24.50

BIRMINGHAM MARKET.

No. 1 Foundry, second quarter	$22.00@22.50
No. 1 Soft, second quarter	22.50
No. 2 Foundry, spot	22.50@23.00
No. 2 Foundry, second quarter	21.50@22.00
No. 2 Foundry, third quarter	19.00
No. 2 Foundry, fourth quarter or last half	18.50@19.00
No. 2 Soft, second quarter	21.00@22.00
Gray Forge, second quarter	19.00@20.00

PITTSBURG MARKET.

Prompt Delivery Small Lots.	
No. 2 Northern	$25.85
Gray Forge	21.85
Bessemer	23.85
Basic	23.85
Second Quarter.	
No. 2 Northern	23.85
Gray Forge	21.75
No. 2 Southern	26.35
Gray Forge, Southern	24.35
Bessemer	23.85
Basic	23.85
Second Half.	
Bessemer	22.85
Basic	22.85
Foundry	$22.85@23.85

Rogers, Brown & Co., Cincinnati, will say in their weekly report:

"An increased number of inquiries of a genuine character, a much stronger feeling regarding last half business, and a growing fear for sufficient supply of iron after July 1 are the features of the week's market. Present strength of the market is due mainly to inability of furnaces to increase their output, as has been expected confidently since the first of the year, and strength of the last half is owing to the sold-up state of the visible supply of iron for that period. It would seem that those who do not now begin to realize that there is going to be a shortage of pig iron during the latter part of this year are likely to be mistaken. They are deceiving themselves into what later will probably prove a very serious state of affairs if they have contracts for finished material and have not covered for pig iron. Each day brings report of some furnace which has withdrawn from the market and each time these withdrawals are for a longer period ahead.

"It would be hard for conditions to be much sounder, and the influence of the American market has been felt abroad, a sharp advance on imported irons having been registered during the week. It is reported that the stocks of foundry and steel-making irons in Great Britain are smaller than at any time within three years, and that orders are coming in from America and Germany at great rate, even at sharply advanced figures.

"From the South comes report of sold-up order books, failure to increase production as has been expected, and furnaces behind on orders to a very large extent. Stocks of pig iron at furnaces and on the yards of consumers are practically exhausted, showing conclusively that the iron is being consumed as fast as made. The movement of iron and car supply from the South is very much improved.

"The first of May arrived with less agitation and smaller prospect of disturbance in labor circles than for a number of years past. This in itself is reassuring and an evidence of lack of discontent and uncertainty in many lines directly connected with the iron trade.

"Coke is quiet, prices are somewhat easier and there is an improvement in delivery. There is still considerable furnace coke offering."

EAU CLAIRE, WIS., AS A JOBBING CENTER.

The Eau Claire, Wis., Telegram says: "It is probable that very few people in Eau Claire realize to what proportions the jobbing business of the Foss-Armstrong Hardware Co. has grown. Their stock occupies three floors and basement of their large building at 122 S. Barstow street, the size of each floor being 24 by 165 feet, the building extending through the block from Barstow street to River street. Besides this building, they occupy the entire building, two floors and basement, on Eau Claire street, formerly occupied by the W. J. Davis Milling Co. The company also has a wareroom at the Omaha station, at which is constantly stored a minimum of two carloads of goods.

"As illustrating the rapidity with which the business is growing, the wholesale business during March was twice that of February, and the business in February was twice that in January. The territory in which the company does business now embraces about sixteen counties in Wisconsin and is rapidly growing. Five traveling salesmen are employed on the road. The location of the concern here means a great deal to the retailers in this section in the way of saving in freight and saving of time in filling orders and in this respect this house has an advantage over distant jobbing houses in supplying merchants tributary to Eau Claire.

"This concern is doing much to give Eau Claire a reputation as a jobbing center and with the development of the country tributary to Eau Claire there is practically no limit to the magnitude of the business open to this concern, and from the character and ability of the men behind the enterprise it may be taken for granted that every demand of the territory will be promptly met in the way of ample stocks and facilities for doing business.

"The Foss-Armstrong Hardware Company as a jobbing institution is one in which Eau Claire citizens may well take pride."

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

			Per Box
IC	14x20		$7 20
IX	14x20		8 25
IXX	14x20		9 40
IXXX	14x20		10 65
IXXXX	14x20		11 80
IC	20x28		14 50
IX	20x28		16 50
IXX	20x28		18 95
IXXX	20x28		21 35
IXXXX	20x28		23 75

COKE PLATES.

Cokes, 180 lbs	IC	20x28	$8 50
Cokes, 200 lbs	IC	20x28	9 00
Cokes, 216 lbs	IC	20x28	9 50
Cokes 270 lbs	IX	20x28	11 25

PIG IRON.

Lake Sup. Charcoal	$28 00@$36 50
North'n Fdy., No. 1	26 00@ 26 50
North'n Fdy., No. 2	25 50@ 26 00
North'n Fdy., No. 3	25 00@ 25 50
Northern Scotch Fdy	26 00@ 26 50
Ohio Strong Softeners, No. 1	26 30
Ohio Strong Softeners, No. 2	25 80
Southern Fdy., No. 1	23 40@ 25 40
Southern Fdy., No. 2	22 90@ 24 90
Southern Fdy., No. 3	22 40@ 24 40
Southern Fdy., No. 4	21 90@ 23 90
Southern No. 1 Soft	23 40@ 25 40
Southern No. 2 Soft	22 90@ 24 90
Southern Gray Forge	21 40@ 23 40
Southern Mottled	20 90@ 22 90
Southern Silveries, 4 to 6 per cent Silicon	27 40@ 29 90
Jackson Co. Silveries, 8 to 10% Silicon	31 40@ 33 40
Ala. and Geo. Car Wheel	28 40@ 28 90
Malleable Bessemer	25 50@ 26 50
Standard Bessemer	25 50@ 26 50
Basic, Pittsburg	22 85

BLACK STEEL SHEETS.

Nos. 11-12	per 100 lbs	$2 60
Nos. 13-14	per 100 lbs	2 65
Nos. 15-16	per 100 lbs.	2 70
Nos. 17-21	per 100 lbs.	2 75
Nos. 22-24	per 100 lbs.	2 80
Nos. 25-26	per 100 lbs.	2 85
No. 27	per 100 lbs.	2 90
No. 28	per 100 lbs.	3 00

GALVANIZED.

Nos. 10-11	per 100 lbs.	$3 15
Nos. 12-14	per 100 lbs.	3 25
Nos. 15-16	per 100 lbs.	3 35
Nos. 17-21	per 100 lbs.	3 50
Nos. 22-24	per 100 lbs.	3 65
Nos. 25-26	per 100 lbs.	3 85
No. 27	per 100 lbs.	4 05
No. 28	per 100 lbs.	4 25

POLISHED SHEET STEEL.

No. 24	per 100 lbs.	$4 90
No. 26	per 100 lbs.	5 00
No. 27	per 100 lbs.	510
No. 28	per 100 lbs.	520

SMOOTH STEEL.

Wood's Smooth, No. 20		$3 05
" "	No. 22-24	3 10
" "	No. 25-26	3 15
" "	No. 27	3 20
" "	No. 28	3 30

PATENT PLANISHED SHEET STEEL.

Patent Planished Sheet Steel.	
"A"	$10 70, "B" $9 20
Dickey Planished Sheet Steel	8½c

SOLDER.

XXX Guaranteed ½ & ½ per lb.	26 c
Commercial ½ & ½ per lb.	25½c
No. 1 Plumbers	24 c

SHEET ZINC.

600 lb. Casks	case, per cwt	9 50
600 lb. Casks	per cwt,	9 50
Sheets	per cwt.	10 50

COPPER.

Copper, sheet, 100 lbs. over, base, 32c

TIN PIGS AND BARS.

Banca, pigs, per lb	44c
Straits, pigs, per lb	44½c
Straits in bars, per lb	47c

LEAD.

American Pig	6½
Bar	7½c
National (White) brands (in less than 100 lb. lots), per lb	8½c
Sheet.	
Full coils per 100 lbs.	$9 00
Cut coils per 100 lbs.	9 50

HARDWARE.

ADZES.

Carpenters'.	
Plumbs	40&10%
Coopers'.	
Barton's	20%
White's	15%
Railroad.	
Plumbs	40&7½%
Ship.	
Plumbs	40%
White's	12½%

AMMUNITION.

Caps, Percussion—per 1,000.	
F. L. Waterproof, 1-10s	40c
G. D.	35c
Musket	60c
Cartridges.	
Winchester Rim Fire Ctgs	50&33%
Winchester Cent Fire, Pistol and Rifle	25&3%
Winchester Cent Fire, Military and Sporting Ctgs	15&3%
Winchester Blank Ctgs. 22 cal.	$1 25
Winchester Blank Ctgs. 32 cal., C. F.	4 60
Winchester BB Caps, Rnd. ball	1 50
Winchester BB Caps, Conical ball	1 95
Winchester Cent. Fire, Military and Sporting Ctgs	15&8%
Primers.	
Berdan Primers	$1 00
Winchester Primers	20%
Shells.	
New Rival Empty Paper Shells, 10 and 12 gauge	25%
New Rival Empty Paper Shells, 16 gauge	20%
Repeater Empty	20%
Leader Smokeless	25%
Winchester Repeater Loaded Shells	40&5%
Winchester Leader	40-10&10%
New Rival Loaded Shells	33⅓ & 11%
Gun Wads—per 1,000.	
Winchester Gun Wads	15%
Powder.	Each
DuPont's Sporting, kegs	$ 50
" " ½ kegs	3 50
" " ¼ kegs	1 40
Dupont's Sm'k'less. 50-lb. drum	22 45
" " 25-lb. kegs	11 2
" " 12½-lb. kegs	5 80
" " 6¼-lb. kegs	2 97
" " 1-lb. cans	15
Shot.	
Drop shot, sizes smaller than B, 25-lb. bags, per bag	1 95
Drop shot, B and larger sizes, 25-lb. bags, per bag	2 20
Buck Shot, 25-lb. bags, per bag	2 20
Chilled Shot, 25 lb. bags, "	2 20

ANCHORS.

Expansion Screw Anchors 10%

ANVILS.

Trenton, 70 to 80 lbs	9½c per lb
Trenton, 81 to 150 lbs	9½c per lb

ASBESTOS.

Board and Paper 25%

AUGERS.

Boring Machine	70%
Irwin's	40&10%
Carpenters' Nut	70%
Hollow.	
Bonney's—list $30.00	75&5%
Stearn's, No. 3	36 00
Post Hole.	
Digwell, 8-inch per doz.	12 50
Iwan's Post Hole and Well	40%
Vaughan's, 4 to 9-in., per doz.	6 25
Rafting.	
Snell's	50&5%
Ship.	
Ford's, with or wi'out screw	40-12½%
Snell's, " " "	40-5%

AWLS.

Brad.		
No. 3 Handled	per doz.	$0 40
No. 1050 Handled	"	80
Shouldered, assorted, 1 to 4,	per gro.	1 20
Patent asst'd, 1 to 4	"	85
Harness.		
Common	"	95
Patent	"	90
Peg.		
Shouldered	per gro,	$1 20
Patent	"	60
Scratch.		
No. 1, handled	"	4 80
No. 15, socket handled	per doz.	1 25
No. 7 Stanley	"	1 80
Sewing.		
Common	per gro.	90
Patent	"	90

AXES.

Boy's Handled.		
Lippincott, 3 lb	per doz.	$5 25
Falls City	"	5 25
Broad.		
Plumbs, West, Pat		40-2½%
" Can. Pat		40-7½%
" Firemen's (handled),	per doz	$18 75
Plumbs, Miners (handled)	"	6 75
Single Bitted (handled).		
Gladiator	3 to 4 lbs., pr dz.	$11 00
Flint Edge	" " "	9 25
Standard	" " "	9 25
Elec. Chopper, Forest Clipper		10 50
Perfect Premier	" "	10 00
Crown	" " "	7 00
Single Bitted (without handles).		
Gladiator	3 to 4 lbs. per doz.	$8 25
Flint Edge	" "	6 75
Standard	" "	6 75
Electric Chopper	" "	6 00
Perfect	"	7 50
Crown	"	6 00
Double Bitted (without handles).		
Gladiator	3 to 4 lbs. per doz.	$11 25
Flint Edge	" "	9 50
Perfect	" "	10 75

The above prices on axes of 3 to 4 lbs. are the base prices.
3½ to 4½ lbs. advance 25c.
4 to 5 lbs. advance 50c.
4½ to 5½ lbs. advance 75c.

BAGS, PAPER NAIL.

Pounds	10	16	20	25
Per 1,000	$2.50	3.75	4.50	5.00

BALANCES, SPRING.

Frary's	50%
Pelouze	20%

BARS, CROW.

Pinch or Wedge Point cwt. $3 25

BASKETS.

Clothes.			
Small Willow per doz.	$6 25		
Medium " "	7 25		
Large " "	8 00		
Galvanized Iron.	½ bu.	1 bu.	1½ bu
Per doz.	$4 75	6 50	8 00

BEATERS.

	Per doz.
Carpet.	
No. 10 Coppered Spring Wire	$0 90
No. 12 Spring Wire	1 10
No. 10 Preston	95
Egg.	Per doz
No. 50 Imp. Dover	$0 70
No. 102 " " tinned	85
No. 150 " " hotel	1 40
No. 10 Heavy hotel tinned	3 10
No. 13 " " "	3 30
No. 15 " " "	3 60
No. 18 " " "	4 50

BELLOWS.

Blacksmiths'	55%
Hand.	
8 inch per doz.	$7 50
10 inch "	9 50
Moulders'.	
12 inch "	11 00

BELLS.

Call.	
3 in. Nickeled Rotary Bell, bronzed base per doz.	$8 00
Cow.	
High Grade	60&10%
Kentucky	70&10%
Door.	Per doz.
New Departure Automatic	$6 00
Rotary.	
2 in. Old Copper Bell	4 00
3 in. Old Copper Bell, fancy	6 00
3 in. Nickeled Steel Bell	4 50
3½ in. Nickeled Steel Bell	5 00
Hand.	
Band Bells, polished	50%
White Metal	50%
Nickel Plated	40%
Swiss	40&10%
Silver Chime	33⅓%
Miscellaneous.	
Church and School, steel alloy	50&10%
Farm, lbs. 40 50 75	100
Each $1.25 1.60 2.35	2.85

BEVELS, TEE.

Stanley's, rosewood handle, new list	35%
Stanley's iron handle	35%

BINDING, OILCLOTH.

Zinc	80%
Brass	70&10%
Brass Plated	75&5%

BITS.

Auger.		
Extra Double Spur		70&10%
Ford's Car and Machine		40&12½%
Triumph		50&5%
Ford's Ship		40&12½%
Irwin		50&5%
Russell Jenning's		35&10%
Clark's Expansive		50-10&5%
Steer's " Small list,	$22.00	25%
" " Large "	$36.00	25%
Irwin Car		45%
Ford's Ship Auger pattern Car		40&12½%
Center		40&10%
Countersink.		
No. 18 Wheeler's per doz.		$1 25
No. 20 " "	"	1 75
American Snail head.	"	75
" Rose "	"	90
" Flat	"	75
Mayhew's Flat	"	1 25
" Snail	"	1 25
Dowel.		
New Jennings		40&10%
Gimlet.		
Standard Double Cut		50%
German Pattern per doz.		$0 50
German	"	65
Gouge	"	80
Spoon	"	80
Countersink	"	1 00
Reamer.		
Jenning's Square	"	2 50
Standard Square	"	75
German Octagon	"	15
Screw Driver.		
No. 7 Common	"	
No. 1 Triumph	"	
No. 2 "	"	
No. 340 Shepardson's	"	
No. 1 Smith's		

BLACKING, STOVE. (See Polish

BLADES, SAW.

Butchers'.
Standard ⅞ & 1¼ in. 40%
Clock Spring 40%
Star 15%
Coil ..... each $1 50
Hack.
Disston's ..... 25&5%
Flexible ..... 33⅓&5%
Star ..... 20&5%
Wood.
Jackson's ..... per doz. $2 25
Disston's—No. 6, 16, 26 & 045.. 4 25
Triumph 3 50
Forest Clipper 3 00

BLOCKS.

Snatch.
Wooden ..... 60&10%
Steel 50%
Tackle.
Iron Strapped ..... 70&10%
Com. Steel ..... 60&10%

BOARDS.

Stove 40%
Wash.
Globe, single ..... per doz. $3 15
" double ..... " 3 65
Magnolia ..... " 3 85
Crystal Glass ..... " 4 35
Brass King ..... " 4 50
Nickel Plate ..... " 4 15
Enamel King ..... " 4 35

BOBS, PLUMB.

Carpenters'.
No. 2, iron ..... per doz. $0 65
No. 00, " ..... " 1 30
No. 0, " ..... " 1 80
No. 3, lead ..... " 2 90
No. 4, " ..... " 3 40
No. 113, brass plated. " 1 10
No. N30, nickel plat'd " 1 30
No. N31, " " " 1 85

BOLTS

Carriage, Machine, Etc.
Carriage ⅝x6 and sizes smaller and shorter ..... 70&5%
Carriage, sizes larger and longer than ⅝x6 ..... 60%
Machine, ⅝x4 and sizes smaller and shorter ..... 70&10%
Machine, sizes larger and longer than ⅝x⅝x4 ..... 60&5%
Elevator ..... 50-10&5%
Plow ..... 60&10%
Stove ..... 80&10%
Tire ..... 75&5%
Wagon Box Strap 70%
Mortise Door.
Gem, iron 60%
" bronze plated 20%
Barrel.
Cast 60%
Wrought .....
" Bronzed 50%
Flush.
Wrought ..... 50&10%
Spring.
Wrought .....
" Heavy .....
Square.
Cast ..... 50&10%
Wrought .....

BORERS.

Angular.
Miller's Falls ..... per doz. $13 00
Bung. Doz.
Enterprise Mfg. Co.'s No. 1 .... $14 00
" " " No. 2 ..... 18 50

BOXES.

Mail, No. 1 2 10
Per doz. $3.50 5.50 17.50
Miter.
New Langdon ..... 15&5%
Stanley's 30%
Seavey's ..... each $1 50

BRACES.

Barber's ..... 50&10&10@50&10&15%
Fray's Genuine Spofford's 60%
" Nos. 66 to 146 ..... 50%
" No. 0106 ..... $3 50
" No. 0110 ..... 3 75
" No. 08 ..... 2 75
" No. 010 ..... 2 85

BRACKETS.

Hay-Rack.
Wenzelmann's No. 1 per doz. $9 00
" No. 2 " 9 60
Shelf.
Cast Iron, Bronzed 50, 10, 5%
Griffin Wrought Steel 75%
" Folding 70%

BROILERS.

Wire 70%
No. Cwron, Self-Basting. 90

BUCKETS.

Pump Rubber.
Wychoff ..... per gr. $4 75
Cooper ..... " 4 7
Champion ..... " 7 50
Victor ..... " 9 25
Star ..... " 5 00
IXL ..... " 6 75
Well.
Galv'd Qts 10 12 14
Per doz $2.90 $3.25 $3.40
Wooden, top ear, plain, per doz 4 00
" " swivel " 5 10

BUCKS, SAW.

Folding ..... per doz. $2 10

BURRS, RIVETING.

Copper Burrs only 15%
Tinners' Iron Burrs only 70%

BUTTS.

Cast Iron ..... 70&5%
Wrought Brass (New List) 30%
Wrought Steel Bright.
Wrought Steel, Japanned.
Nos. 731 and 733 ..... 70%

CALIPERS.

Double ..... 65&5%
Inside and Outside ..... 65&5%
Wing 70%

CALKS.

Logger's Boot.
(Lufkin R. Co.'s), per M $3 75
Toe.
Shoenberger ..... per ℔ 5 c
Bessemer ..... " 4½c
American ..... " 7 c
Swedes ..... " 8½c

CANS.

Cheese Factory.
Ontario Pattern.
Gallons 20 30 40
Each $4.25 $5.00 $6.25
Milk.
Holstein.
Nos. 300 301 302
Gals 5 8 10
Per doz. $26.00 $27.00 $29.00
Chicago Pattern.
Nos. 105 108 110
Per doz $20.00 $22.50 $24.00
Iowa Pattern.
Nos. 408 410
Per doz $24.50 $25.50
New Elgin Pattern.
Nos. 705 708 710
Per doz. 27.00 $29.00 $30.50
Burn Pattern.
Nos. 700 701
Gals 8 10
Price $2.40 $2.65

CAN OPENERS.

See Openers.

CAPS, GUN.

See Ammunition.

CARPET STRETCHERS

See Stretchers.

CARRIERS.

Hay.
Diamond, Regular ..... each $3 50
Diamond, Sling ..... " 6 50
Myers' Imperial ..... " 3 50
" Clover Leaf ..... " 3 65

CARTRIDGES.

See Ammunition.

CASTERS.

Standard—Ball Bearing ..... 50&10%
Bed ..... 60&5%
Common Plate.
Brass Wheel ..... 60&10%
Iron and porcelain wheels, new list ..... 60&5%
Philadelphia Plate, new list 70%
Martin's 60%
Payson's ..... 75&10%

CATCHERS, GRASS.

Carroll s No. C ..... per doz. $4.25
Wildermuth's
Nos. 1 2 3
Per doz. $5.60 $5.75 $6.25
Nos. 4 5 6
Per doz. $8.75 $9.50 $10.00

CHAIN AND CHAINS.

Breast Chains.
Doubleslack ..... doz. pairs $5 75
With Covert snaps. " 5 00
With slide ..... " 3 25
Without slide ..... " 2 85
Bright Ox Chains.
⅝in. $7.25; ½ in. $5.45 per 100 lbs

Cable Coil Chain.
Inch ..... 5/16 ½ 7/16 ⅜
Per 100 lbs. $10.80 $8.00 $7.00 $6.20
Inch ..... 7/16 ½ ⅝ ¾
Per 100 lbs. $6.00 $5.90 $5.75 $5.65
Inch ..... ¾ 1 1¼
Per 100 lbs. $5.55 $5.55 $5.65
Cable Log Chain.
Advance 25c per 100 lb. on Cable Coil
Cow Tie Chains.
American 2 toggle ..... 50&5%
" toggle and snap ... 50&5%
" open & closed ring, 50&5%
Halter Chains.
American, new list 33⅓%
German ..... 50&10&5%
Niagara, new list ..... 40&5
Brown's, " 40%
Picture Chains.
Light Brass, 3 ft. ..... per doz. 55c
Heavy Brass, 3 ft. ..... " 90c
Pump Chain.
Galvanized, per 100 lbs. $5.50
Safety Chain.
Brass 60%
Special Steel Loading Chain.
Inch ..... ½ 7/16 9/16
Per 100 lbs. ... $16.00 $13.50 $12.50
Stretcher Chains.
7/16 in. $8.50; ½ in. $7.75 per 100 lbs.
Tie-Out Chains.
Brown's ..... 70&10%
Trace Chains.
Western Standard.
6½— 6-2 ..... per pair 30c
6½— 8-2 ..... " 34c
6½— 8-3 ..... " 33c
6½—10-2 ..... " 38c
7 — 8-2 ..... " 38c
7 —10-2 ..... " 42c
7 —10-1 ..... " 48c
7 —10-0 ..... " 60c
Add 2c per pair for Hooks.
Add 2c " for Twist Link.
Wagon Stay Chains.
Inch ..... ½ 7/16 ⅜
Per 100 lbs. ... $6.50 $6.00 $5.50

CHALK, CARPENTERS'.

Blue ..... per gross 75c
Red ..... " 65c
White ..... " 55c
Common White Sch'l Crayon 8c

CHARCOAL

In bags ..... per bag 90c

CHECKS, DOOR.

Blount 33⅓%
Sargent's 33⅓%

CHIMNEY TOPS.

Iwan's Volcaño 50%

CHISELS.

Box,
Inches 10 12 14
Round, per doz. $2.10 $2.25 $2.75
Flat " 2.85 3.60 4.20
Cold.
Good quality, ½ in. and larger ..... per ℔ 12c
Smaller size per doz.
Socket, Framing and Firmer.
Barton's 20%
Tanged, Firmer.
With handles ..... 30&5%
Choppers, See Cutters, Meat.

CHUCKS, DRILL.

Goodell's, for Goodell's Screw Drivers ..... per doz. $6 25
Yankee, for Yankee Screw Drivers 5 00

CHURNS.

Anti-Bent Wood, Gal.. 5 7 10
Each $3.90 $4.60 $4.85
Belle, Barrel 65-7½%
Common Dash, Gal.. 4 5 6
Per doz. $7.75 $8.50 $10.50
Union, Gal. 5 7 10
Each $3.65 $3.90 $4.75

CLAMPS

Adjustable.
Martin's 30%
Carpenters'
Steel Bar 25%
Hose.
Sherman's, brass, ¾ in., per doz. .33c
Double, brass, ¾ in., " 65c
Saw Filers.
Disston's list, $30.00 ..... 30%
Stearn's, No. 0, $3.50; No. 1, $11.50; No. 3, $5.00 doz.
Wentworth's. No. 1 $6.00; No. 3 $7.50

CLAWS, TACK.

Cast, wood hdle ..... per doz. 45@60c
Forged steel, wood hdle $0.80
Solid Steel ..... " 1.60
Giant ..... " .60

CLEANERS.

Drain.
Iwan's Adjustable 55%
Iwan's Stationary ..... 40&5%
Pot.
Wire ..... per doz. $0.55
Side-walk.
Steel ..... per doz. $3.25
XLCR ..... 65&5%

CLEAVERS.

Family.
Griffin, In 6 7 8
Per doz. $5.50 $5.75 $6.25
Royal ..... per doz. 2 25
Butchers.
Beattys, Kitchen 40%

CLEVISES.

Malleable ..... 5c ℔

CLIPPERS.

Bolt ..... $1.90@$4.75

CLIPS.

Axle ..... 65&5%
Damper.
Standard ..... per doz. 65c
Troy ..... " 38c
Hame ..... " 17c

Emery. CLOTH.

Star 50%
B. & A. 50%
Hardware Wire—full rolls (100 ft.)
2 to 8 mesh black, per 100 sq. ft. $2
9 to 12 " " " 3
2 to 3 incl., Galv.—in full roll ... 3 75
4 and 5 ..... " 4 00
6 ..... " 4 25
7 and 8 ..... " 4 75
Screen Wire.
12 mesh, painted, per 100 sq. ft. 1.35

COCKS AND FAUCETS.

Compression Plain Bibbs 60%
Lever Bibb Cocks 60%
Compression Hose Bibbs.. 50-10&5%
Telegraph Faucets (new list) ... 50-5%
Racking Cocks (new list) 60%
Compression Lock C'ks(n'w list) .. 70%
Andrew's Brass Faucets 70%
Angle Plug Faucets, per doz. ... $0.85
Milk Can Faucets, per doz. .. $2.60-4.20
Petroleum Faucets 75%

COLLARS, STOVE PIPE.

Inches 5 6 7
Plain Tin .... per gro. $1.90 $2.40 $3.50
Japanned Tin " 3.00 3.00 4.25
Lacquered Brass " 3.00 3.50 4.25

COMBS, CURRY.

Nos 000 11 15 39 89 108
Per doz. $0.37 .60 1.90 .90 1.15 .80
Nos 299 320 390 532 620 1400
Per doz. $1.05 .85 1.35 1.20 .75 1.40

COMPASSES.

Carpenters' 60-10-10%
Pencil—Faber's ..... per doz. $1.00

COPPER—See Metals.

COPPERS.

Soldering.
1 ℔ ..... per ℔ 41c
1½ ℔ ..... 33c 2 ℔ .... " 37c
3 ℔ and larger ..... " 34c

CORD.

Picture.
White Wire (new list) 80-10-10%
Sash.
Baltic Braided Flax ..... per ℔
Silver Lake, white 7-32 in. "
" " " 8-32 in. "
Keystone ..... 8-32 in. " 28½c

CORKSCREWS.

Humason & Beckley 33⅓%
Walker's 33⅓%
Williamson's Regular ..... 40&10%
Williamson's Forged Worm 50%

COTTERS, SPRING.

All sizes—new list ..... 90&30%

COUPLINGS, HOSE.

Brass ..... per doz. $
Brass Plated ..... " .85

COVERS, WAGON—See Tents

CRADLES, GRAIN.

Morgan's Grapevine ... per doz. $22

CRAYONS—See Chalk.

CROW BARS.

Pinch or Wedge Point, per 100 lbs. $3.25

CUTTERS.

Glass.
Red Devil 45%
Smith & Hemenway Co. 50%
Woodward 40%
Meat.
Enterprise Nos. 5, 10, 12, 22, 32 and 42 ..... 25%
No. 202, list, $1.50 ea. ..... 40&7½%
Pipe.
Stanwoods ... No. 1 2 3
Each $0.85 $1.50 $4.00
Slaw and Crout.
3-knife Crout ..... per doz. $9 75
1-knife Slaw ..... " 1 65
2-knife " ..... " 2 25
Washer ..... " 7 75

DAMPERS, STOVE PIPE.

Standard ..... 50&10%
American ..... 45&10%

DIES AND STOCKS

Discount ..... 40&5%
King's, Little Giant 33⅓%

DIGGERS.

Post Hole.
Acme ..... per doz. $ 9 25
Atlas ..... " 9 00
Eureka ..... " 7 50
Hercules ..... " 10 25
Iwan's Split Handle ..... " 7 50
Iwan's Perfection ..... " 9 00
Iwan's Hercules pattern " 10 00
Ryan's ..... " 17 00
See also Augers—Post Hole.
Dividers, Wing ..... 65&10%

DOOR CHECKS—See Door.

DOORS, SCREEN.

⅞ in. 4-panel painted, per doz. $7 93
1⅛ in. " " " 9 50
1⅛ in. 3-panel natural pine, fancy ..... per doz. 12 40

DOOR HANGERS—See Hangers.

DRILLS.

Bit Stock ..... 60&10%
Blacksmith's Twist 60%
Breast.
Common ..... each, $2 25
Millers Falls ..... " 2 10
Hand
Goodell's Automatic.
Nos. 01 03 3 20
Per doz. .. $7.75 $12.50 $12.50 $11 00
Goodell's Single Gear per doz. 15 75
Millers' Falls " " " 12 75
" " Double " " 15 25
Reciprocating.
Goodell's ..... per doz. $16 50
Bit Stock.
Standard List ... 60&5%@60%@10%

DRIVERS, SCREW.

Standard ..... 65&10%
Lock Ferrule 60%
Champion 50%
" Pattern 70%
Clark's Interchangeable 30%
Edison 60%
Reed's Lightning ..... 45&5%
Goodell's Spiral ..... 50, 10, 5&2½%
Yankee Ratchet 50%
" " Spiral ..... 50&10%
Smith & Hemenway Co. ..... 40&5%

EAVES TROUGH. GALVANIZED.

Territory. L. C. L.
Eastern ..... 70&30%
Central ..... 75&10&2½%
Southern ..... 75&7½%
Western ..... 75&7½%
S. Western 75%
Terms, 2% for cash. Factory shipments generally delivered.
See also conductor pipe and elbows

EGG BEATERS—See Beaters.

ELBOWS.

Adjustable Stove.
Inches 5 6 7
Smooth, per doz. $0.70 $0.75 $1.10
Plan'd " 1.80 2.00 2.65
Corrugated Conductor.
Discount 80%
Corrugated Stove.
Inches 5 6 7
Smooth, per doz. $0.70 $0.80 $1.30
Pol'd " 1.30 1.40 2.10
Plan'd " 2.00 2.20 3.00
Four-Piece Stove.
Inches 5 6 7
Smooth. per doz. 0.60 $0.65 $0.95
Planished " 1.40 1.70 2.35

EMERY CLOTH—See Cloth.

EMERY, TURKISH.

Size ..... 5-lb. pkgs. ½ kegs, kegs
No. 60 to 150, per lb. 6c 4c 4c
Flour ..... " 5c 3c 3c

ENAMEL, IRON.

Nubian, ½-pt. cans ..... per doz. 1 65
Peerless 1 25

EXTRACTORS. PIG.

See Forceps, Pig.

EYES.

Bright Wire Screw—See Goods, B. W
Drifting Pick ..... 60, 10&5%
Hooks and—
Brass ..... 50&10%
Iron 70%

FASTENERS, STORM SASH

Schroeder's ..... per doz. 85
Sensible ..... " 1 15

FAUCETS—See Cocks.

FILES AND RASPS.

Delta 70%
Disston's ..... 75&10%

FLUE STOPPERS—See Stoppers.

FORCEPS, PIG.

Superior ..... per doz. $4 75
Whisson's Imp ..... " 5 25

FORKS.

These goods are sold net this year.
Barley.
Steel, New List ..... 65&10%
Wood, 4 tines, per doz. $5.00
Coal, Coke, Cottonseed ..... 33⅓&5%
Hay.
2 tine ..... 60&10%
3 " 65%
4 " ..... 65&7½%
Digging 70%
Scoop 33⅓%
Header.
3 tine 65%
4 " 65%
Manure.
4 tine ..... 60&10%
Ore 40%
Spading.

FRAMES.

Hack Saw.
Union ..... per doz. $5 75
Jenning's adj. ..... " 7 50
Cast ..... " 2 50

FREEZERS, ICE CREAM.

Arctic.
Qts. 1 2 3 4 6
Each $1.10 1.30 1.50 1.80 2.30
Qts. 8 10 12 15
Each $2.95 3.80 4.50 5.20
White Mountain.
20 qt., New Platform ... each $19 10
25 qt., " " " 22 60
25 qt., Sampson Power . " 43 50
40 qt., " " " 58 25

GAUGES.

Butt and Rabbet.
Cream Pail.
Fairmont ..... per doz. $3 75
Marking, Mortise, etc. ..... 50&10%
Saw.
Wire.
Disston's 25%

GIMLETS.

Discount ..... 35@40%

GLASS, WINDOW.

First two brackets ..... 90&5%
Above " " 90%

GLASSES, LEVEL.

GLUE.

Bulk.
B Amber ..... per lb. 12 c
A White ..... " 15 c
H. S. Amber ..... " 16½c
Liquid.
Army & Navy 40%
Le Page's—
List "A" 37½%
List "B" 33⅓%
List "C" 25%

GOODS.

Bright Wire ..... 35&15%

GREASE, AXLE.

Wood Boxes.
Diamond ..... per gro. 5 50
Frazer's 9 50
Hub Lightning 5 25
Paragon 6 75
Wood Pails.
Frazer's, 15 lb. 80c; 25 lb. $1.30 each
Hub Lightning, 15 lb. 55c; 25 lb. 70c each.
Tin Cans.
Chamellene Graphite.
1 lb. per gross $9 50
3 lb. per gross 25 00
5 lb. per gross 37 00

GRIDDLES.

Soapstone 50%

GRINDSTONES.

Family.
Inches 7 8 9
Per doz. $8.25 9.00 10.50
Loose.
Per ton ..... $20 00@$21 00
Mounted.
Ball Bearing 1 2 3
Each $3.15 3.00 2.85
Common Bearing .. 1 2 3
Each $3.00 2.80 2.65

GUN WADS.
(See Ammunition.)

HAFTS, AWL.

Brad.
Common ..... per doz. $0 19
Peg.
Common ..... " 22
Patent, plain top ..... " 47
" leather top ..... " 52
Sewing.
Common ..... " 22
Patent ..... " 52

HALTERS.

Jute Rope ..... per doz. $0 85
Sisal Rope ..... " 1 85
Web ..... " 1 75
Leather, rope tie ..... " 7 50
" leather tie ..... " 10 00

HAMMERS, HANDLED.

Blacksmiths' Hand.
Plumbs ..... 60&5%
Engineers'.
Plumbs ..... 60&5%
Farriers'.
Plumbs ..... 40&12½%
Machinists'.
Plumbs ..... 60&5%
Nail.
Plumbs ..... 40&7½%
Quaker City ..... per doz. $3 50
Cast ..... " 1 15
Maydole's ..... 30&5%
Riveting.
Plumbs ..... 40&12½%
Shoe.
Cast ..... per doz. 75c
Tack.
All Iron ..... per doz. $0 35
Pol'd Iron, Hickory hdl. " 50
Mall. Iron, Inlaid ..... " 1 55
Magnetic 1 2 3
Per doz 70c 80c $1.00
Magazine ..... per doz. $4 75

HAMMERS, HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs ..... 75&5%
5 lbs. and over ..... 75-10&5%
Masons'.
Single & Double Face ..... 75&5%

HANDLES.

Auger.
Common Assorted ... per doz. $0 38
Peck's Adjustable ... " 2 10
Ives' " ... per set 1 35
Axe 60%
Chisel.
Hickory, Tanged Firmer, Assorted, 33c; Large, 38c per doz.
Hickory, Socket Firmer, Assorted, 27c; Large, 30c per doz.
Applewood, Tanged Firmer, Assorted, 29c; large, 38c per doz.
Applewood Socket, Firmer, Assorted ..... per doz. 24c
Coal Pick ..... 50&10%
Drifting Pick ..... 50&10%
File, assorted 13c large 18c per doz.
Hammer.
Adze Eye ..... per doz. 40c
Blacksmiths' ..... per doz. 40c@70c
Machinists' ..... " 45c@70c
Hatchet ..... per doz. 40c
Hay and Manure Fork 30%
Hoe and Rake 30%
Pick
Plain ..... per doz. 75c
Varnished ..... " 80c
Screw Driver.
Assorted ..... " 37c
Large ..... " 48c
Shovel and Spade 33⅓%

HANGERS.

Barn Door.
Challenge ..... 60&10%
Peerless ..... 70&10%
Silver Star ..... 60&5%
Storm King ..... 60@5%
World's Best 50%
Wagner's Adjustable ..... 70&10%
Warehouse 60%
Griffin ..... 70&10%
Conductor P
Griffin ..... 70&10%
Iwan's Perfection 50%
Eave Trough.
Baker's ..... per gro. $2 25
Imperial 20%
Wire 33⅓%
Parlor Door.
Acme ..... per set $3 75
Ives' Improved ..... " 2 50
Lane's Standard ..... " 3 50
" New Model ..... " 3 10
Le Roy Noiseless ..... " 4 00
Richards' ..... 40-10&5%

HASPS.

Hinge, Wrought 40
With Staples—See Staples.

HATCHETS.

Crown ..... 50-10&5%
Cast Claw ..... per doz. $1 20@1 45
Cast Shingling ..... " $0 95@1 20
Germantown 40%
Plumbs ..... 33⅓&5%
Underhill's Star Lath ..... 40&10%

HAY KNIVES.

See Knives.

HAY RACK BRACKETS.

Wenzleman's No. 1 .... per doz. $ 9 00
" No. 2 .... " 9 00

HINGES.

Blind.
Clark's Gravity ... per doz. sets 95c
Parker's 65%
Shepherd's Noiseless, for Wood casing ..... per doz. 1 05
Gate.
Clark's 1 2 3
Hgs & Ltch .... doz. $2.50 2.90 4.00
Hinges only .... " 1.90 2.20
Latches only ... " .70 .75
Knuckle ..... per doz. prs. $6 00
Leed's ..... " sets 6 75
Superior ..... " prs. 9 50
Spring.
American 20%
Chicago ..... 25&5%
Columbia Dbl. Acting .... 40&10&5%
Gem 25%
Ideal Detachable .... per gro. $11.10
Matchless 30%
New Idea ..... per gro. $6.40
Oxford 20%
Wrought Iron.
New Lists .....
Griffin.
Light Strap Hinges 60%
Heavy Strap Hinges 65%
Light T Hinges 55%
Heavy T Hinges 45%
Extra Heavy T Hinges 60%
Cor. Heavy Strap 70%
Cor. Ex. Heavy T ..... 65&10%
Screw Hook and Strap.
6 to 12 in ..... per 100 lbs. $3 75
14 to 20 in ..... " " 3 65
22 to 36 in ..... " " 3 40
Screw Hook and Eye.
⅝ in ..... per 100 lbs $6 75
¾ in ..... " " 7 75
⅞ in ..... " " 9 75

HOES.

Garden ..... 70&10%
Grub.
Extra 70%
Hazel ..... per doz. $5 00
Ladies' and Boys' 75%
Mortar ..... 75&10%
Planter's Eye 62½%
Weed ..... 75&15%

HOLLOW WARE—See Ware

HOOKS.

And Eyes.
Brass ..... 50&10%
Iron ..... 65&10%
Awning ..... per gro. $1
Belt.
Brown s ..... 70&5
Jones' ..... 65&5
Bench.
See Stops, Bench.

Box.
Inch..... 6 8 10 12
Per doz.....$1.35 1.65 1.75 2.30
Humason & Beckley's, per doz. 2 50
(See Goods, Bright Wire.)
Bush.
Common Axe Handle, per doz. $7 00
Chain.
Inch... ¼&5/16 ⅜ 7/16 ½
Per 100 $7.60-8.10 9.75 11.50 12 60
Clothes Line.
Japanned.....per doz. 22c@34c
Galvanized..... " 40c
Coat and Hat.
Cast Iron .....per gro. 72c@$1 50
Gem Wire.....70¢
Conductor.
Malleable.....50&10¢@50&10&5¢
Wrought .....40&10¢@50¢
Corn.
Common, unpolished, per doz. $1 35
" polished.... " 1 80
Cut Easy"..... " 2 75
Gal.
See Goods, Bright Wire.
Grass.
Common. Nos..... 2 3 1
Per doz.....$1.50 1.60 1.70
German.....per doz. 1 75
Little Giant..... " 2 75
Hammock.
With Plate.....per doz. 50c
With Screw..... " 45c
Lambrequin, or Drapery, per gro. 21c
Picture .....50¢@50&10¢
Potato and Manure.....70&12½¢
Screw.
Brass.....80&5¢
(See Goods, Bright Wire.)
Seat Spring.....per ℔. 5½c

HOOPS, TUB.

Elastic.....per case of 2 doz. $1.50

HOSE, GARDEN.

					Coupled per ft.
Heron-3ply-¾" guar. press.				55 lbs.	7½c
Crane	"	"	"	75 "	8½c
Falcon	"	"	"	95 "	9½c
Eagle	"	"	"	120 "	10½c
Condor	"	"	"	150 "	11½c
High Test	"	"	"	200 "	12½c

COTTON COV. RUBBER HOSE

High Grade-¾"-guar. press.				400 lbs.	11½c
Special	"	"	"	300 "	9½c
Leader	"	"	"	100 "	7½c

HUSKERS.

Boss.
Nos..... B BB E 200
Per doz..... $2.00 2.00 1.75 .80
Nos..... L PP P K
Per gro..... $5.40 6.00 6.00 10.50
Nos..... 2000 3000 O
Per gro..... $3.50 9.00 24.50
Nos..... 60 59 64 68
Per doz.....$2.15 2.15 .85 1.45
Brinkerhoff's.
Per gro.....$14 40
Clark's
Nos..... 1 63 200 400
Per doz..... $0.40 .75 .75 1.75
Nos..... 200s 40s 3s 4s
Per doz..... $0.85 1.50 1.25 1.25
Nos.....A AB F
Per doz.....$3.00 $4.25 $3.50

IRON.

See Metals—First column.

IRONS.

Curling.
X.....per doz. $0 40
Y..... " 50
Z..... " 58
Jewel..... " 85
Imperial ..... " 1 00
Pinking ..... " 70
Plane.
Wood Bench.....30&5¢
Sad.
Charcoal .....per doz. $11 00
Common, Polished, per 100 ℔. 4 50
" Nickel plated, " 5 25
Chinese Polishing.....per doz. 7 40
Laundry. No. 1 ..... " 5 75
" No. 2 ..... " 6 25
Mrs. Pott's,
No. 50 J, Enterprise...per set 86c
No. 55 J, " ... " 83c
No. 50 T, " ... " 91c
No. 55 T, " ... " 88c
No. 50, Howells..... " 86c
No. 55, " ..... " 90c
Tailors' Sad.....per ℔. 5½c
" Geese ..... " 5½c
Tuyere.
Single Duck Nest....per doz. $5 25
Double " " ..... " 6 25
Sutton .....each 2 60

JACKS.

Locomotive..... 70¢
Wagon.
Oliver
Nos 0 00
Each.....$0.60 $0.85
Standard.
Nos..... 1
Each..... $0.60 1.00
Wilcox.
Nos..... 1 2 3
Each.....$0.85 1.20 2.90

KETTLES.

Brass.....15¢
Cauldron .....40&5¢
Copper.....per ℔. 27c
Maslin .....65¢
Sugar .....50¢

KNIVES.

Best Topping.
Clyde, 9-in. Scimiter Blade, dz. $3 85
California.....3 40
Cooper's Hoop.....15¢
Corn.
Clipper.....per doz. $1 75
Disston's..... " 2 75
Earle's ..... " 3 00
Woodford..... " 2 25
Drawing.
Standard .....70¢
Adjustable.....15¢
Barton's Carpenters'.....10¢
Folding Handle.....35&5¢
Hay.
American, Sickle Edge..doz $10 50
Canton, Sickle Edge..... " 8 25
Heath's ..... " 8 00
Iwan's Sickle Edge..... " 9 50
Iwan's Impv'd Serrated.. " 10 00
Lightn'g, Holt's Genuine " 6 50
Lightning Pattern..... " 6 00
Wadsworth's Sp'r Point " 8 50
Hedge.
Challenge ....per doz. $6 00
Disston's..... " 3 75
Mincing.
Common, Single 40
" Double ..... " 50
Streeter, 4 Blade..... " 1 30
" 6 Blade..... 2 00
Putty.
Common..... " 60@1 00
Lander's..... per doz. $1 40@1 75
Scraping.
Beech Handle.....75@1 00
Lander's.....5 25@6 00

KNOBS.

Door.
Mineral .....per doz. $0 75
Porcelain ..... " 83
Jet..... " 83

LADDERS.

Common Long.
Per ft .....9c@14c
Extension.
Per ft 12c
Step.
Common, per ft.....6½c
" with Shelf, add 10c.
Keystone.....15c
Triumph, per ft 20c

LANTERNS.

Bull's Eye Police.
3-in. Flash Light.....per doz. $6 00
2½-in. Regular..... " 4 00
3-in. Regular..... " 5 00
Tubular.
Buhl.....net prices

LEADERS, CATTLE.

Nos 1 2 3
Per doz.....$0 55 $0 70 $2 75

LEATHER, LACE.

Cut.....32½¢
Sizes.
Ex. Quality.....per sq. ft. 27c

LEATHERS, PUMP.

Valve and Plunger .....10¢

LIFTERS.

Stove Cover.
Coppered.....per gro. 1 75@3 65
Ideal..... " 5 50
Alaska, Coppered " 4 00
" Nickeled. " 5 00
Transom.
Payson's.....80¢

LINES.

Chalk.
Twisted in 20-ft. hanks.
Nos..... 4 6 7 8 9
Per gross $1 50 2 00 2 25 2 50 3 00
Twisted in 50-ft. balls.
Nos..... 1 2 3 4
Per doz.....25c 30c 35c 41c
Braided in 20-ft. hanks.
Nos..... 0 1 2 3
Per doz.....22c 25c 31c 35c
Masons', in 100-ft. hanks..doz... 80c
Clothes.
60-ft. Jute.....per doz. $0 95
72-ft. " ..... " 1 15
60-ft. Sisal ..... " 1 60
72-ft. " ..... " 2 15
50-ft. Cotton ..... " 1 15
50-ft. Braided Cotton. " 95

LINING, STOVE.

In Bricks.....per crate 42c

MACHINES.

Boring.	Without Augers	With Augers
Angular.....per doz.	3 00	4 40
Upright.... "	2 60	4 00
Leather Riveting.		
Chicago, Pomeroy....per doz.		$9 00
Excelsior ..... "		2 00
Handy ..... "		2 00
Little Giant..... "		3 00
Pony, Pomeroy..... "		7 20
Washing		
Winner.....per doz.		54 00
Keystone ..... "		54 00
U. S. Steel..... "		60 00
Advance, f.o.b. Chic'go "		24 50

MAIL BOXES.

See Boxes.

MALLETS.

Carpenters'.
Fibre Head, Small ...per doz. $5 00
" " Medium. " 5 75
" " Large... " 7 00
Round Hickory..... " 1 75
" Lignumvitæ .. " 2 85
Square Hickory..... " 1 75
" Lignumvitæ.. " 3 40
Tinners'.
Applewood ..... " 1 70
Hickory..... " 75@1 15
Hickory Sheet Iron.. " 1 30

MATS.

Door.
National Rigid.....50, 10&5¢
Acme Steel Flexible.....33⅓¢
Stove.
No. 2. .....per gross. $3.25
No. 1. ..... " 3.50
No. 1 Asbestos Toasters, or wire-covered Stove Mats, with handle.....per doz. 1.10
No. 2 Asbestos Toasters, with ring.....per doz. .60

MATTOCKS.

Plumbs.....70¢
Extra .....60¢

MAULS.

Iron. lbs.	10	13	16	1
Per doz.	$4.00	4.50	5.25	5.60
Wood face, lbs.	10	12	14	
Per doz	$5.00	5.50	6.00	

Wood Choppers'.
Lake Super'r & Oregon Pat. 75&10¢

MEASURES.

	½ pk.	1 pk.	bu
Galvanized, per dz.	$2.25	$3.00	$3.85
Japanned... "	1.75	2.45	3.15

MICA.

First Quality.....15¢
Second Quality.....20¢

MILLS, COFFEE.

Enterprise .....25¢
Parker.....40 12½&25¢
Arcade .....40-12½&25¢

MITRE BOXES.

See boxes.

MOPS.

Eris.....per doz. $3 15
Handled Cotton.

Pounds.....	¾	1	1¼	2
Per dozen...	$2.00	2.35	2.65	3.25

MOWERS, LAWN.

Ball-Bearing.

Inches.....	14	16	18	20
Each	$6.25	6.75	7.25	8.00
Cheap Grades.				
Inches.....	12	14	16	18
Each	$2.25	2.25	2.35	2.50

Clipper .....50, 10&10¢
Yale.

Inches.....	4	16	18	20
Each.....	$3.50	3.75	4.00	4.35

Philadelphia.
All Styles Except A & E 60, 10&10¢
Style A.....50&10¢
Style E, High Wheel.....60, 10&10¢
Drexels.....40¢
All Day.....Net Pric

NAILS.

Cut Steel.....rates, $2 50
Cut Iron.....2 60
Wire.
Small Lots.....$2 25
Carload " 2 25
Cement Coated..... 2 10
Horse Shoe.
Ausable .....55&5¢
Capewell .....15¢
Perfect .....55&5¢
Putnam. .....20-5¢
Star.....35&5¢
Clover Leaf.....per lb. net, 10½c
Picture.
Brass Heads.....25¢
Brads.....65¢
Furniture 30

NAIL PULLERS.

See Pullers.

NAIL SETS.

See Sets.

NETTING, POULTRY.

Galvanized before Weav'g. ..80&10¢
" After Weaving ....80&5¢
Cut Pieces.....65&5¢

NIPPERS.

End Cutting.
Stubb's Pattern. Ins. 5½ 6
Per dozen $4.00 $4.35
End and Diagonal Cutting.
Swedish Side.....75¢
Utica Drop Forge & Tool Co...60¢
Hoof.
Heller's .....40&10¢
V. & B.....55-5¢

NOZZLES.

Hose.
Genuine Gem.....per doz. $3 15
Magic..... " 3 50
Mystic..... " 2 90

NUTS, HOT PRESSED.

Square Blank.

In.	¼	5/16	⅜	7/16	½	⅝
℔.	9½c	8c	6½c	5½c	5½c	5c 4½c

Square Tapped.

In.	¼	5/16	⅜	7/16	½	⅝	¾	⅞
℔.	12½c	10½c	8c	7½c	6½c	6½c	6c	8c

For 5 lb. boxes add ½c per ℔. to above prices.

OILERS.

Chase Pattern.
Brass and Copper.....60¢
Zinc..... .....60¢
Engineers'
Cannon .....55¢
Tin.....per doz. $2.00@$3.25
Machine.
Common .....per doz. $0 58
Copper Plated Steel.. " 85
Malleable Iron.....60, 10&5¢
Jappaned.....65@75c

OPENERS.

Box.

Inches.....	10	12	14
Flat...per doz	$2.85	3.00	4.15
Round "	2.10	2.25	2.75

Can.
Delmonico.....per doz. $1 30
Never Slip..... " 0 65
rate'.
V. & B..... " 5 75

OUTFITS, COBBLING.

Combination.....per doz. $11 00
Economy..... " 4 65
Family..... " 9 75

PADLOCKS.

Standard Wrought .....70&5¢
Champion .....50¢
Eureka.....40, 10&5¢
Yale .....60&5¢

PAILS.

Cream.
14-qt., without Ga....per doz. $2 50
20-qt., " " .... " 3 00
20-qt., with Gauge.... " 3 50
Sap.
10-qt., Galvanized..per 100.. $13 00
12-qt. " " .. 14 50
14-qt. " " .. 16 25
16-qt. " " .. 17 75
10-qt., IC Tin..... " .. 10 25
12-qt " " .. 11 75
14-qt. " " .. 13 00
10-qt., IX Tin..... " .. 12 75
12-qt. " " .. 16 00
14-qt. " " .. 17 00
Stock

	Galvd. qts.	14	16	18	20
Per doz.....	$3.75	4.00	4.75	5.25

Water.

Galvanized, qts	10	12	14
Per doz	$1.95	2.20	2.45

Wood.
Cable, 2-Hoop..... .per doz. $1 70
" 3-Hoop..... " 1 90
Cedar, 3-Hoop..... " 2 85
Standard, 2-Hoop..... " 1 60
" 3-Hoop..... " 1 80

PANS.

Dripping.....60&5¢
Fry.
Common.....75&10¢
Acme .....70¢
Roasting.
Paxton.

Nos.....	1	2	3	4
Per doz..	$4.75	$5.75	$6.50	$7.50

Neverburn.. 4.00 4.50 5.50 6.
Savory No. 200 .....per doz 8.

PAPER.

Building.
Plain .....per 100 lbs. $1 35
Tarred..... " 1 35
Tarred Felt..... " 1 65
No. 20, Red Rosin.....pr roll 40
No. 30, Red Rosin ..... " 55
Sand and Emery.
Star.....low list..50¢
B. & A.....50¢
Wrapping
Drab Fiber.....per ℔.
Rag.....

PARERS

Apple.
Bay State.....per doz. $13 00
Turntable ..... " 00
White Mountain .... " 4 75
Reading..... " 6 50

Potato.
Goodsell's Saratoga 10½ in. doz. 6 50
" " 5 in.. " 5 50

PICKS.

Adze Eye Ore 70%
Drifting and Poll Picks.....70%
Plumbs Railroad 70%
Surface.....70%

PINCERS.

Carpenters', cast steel.

In.	6	8	10	12
Per doz.	$1 80	$2 40	$2 80	$3 50

Blacksmith's 45%
Heller's 40%

PINS.

Clothes.
Common.....per box of 5 gro. $0 52
Hoyt's..... " " 31
U. S..... " " 70

Picket.
Fluted 15 in.....per doz. $0 70
" 21 in..... " 1 60
Spiral 1 90

PIPE.

Conductor.
Territory.
Eastern.....70%
Central.....65&10%
Southern.....65%
Western.....65%
Southwestern.....50-25&2½%

Lead.
Full coils.....per ℔. 7¼c
Cut " ..... " 7¾c

Stove.

Acme—In.	5	6	7
Smooth, per jt..	8½c	9½c	10½c
Planished " ..	32 c	33 c	42c
Peerless—Smooth.	7½c	8 c	9½c
Polished	14½c	15½c	18c
Planished	28 c	31 c	35½c

Made-up—In.	5	6	7
Smooth	7½c	8c	9½c

7 to 6 in. Smooth Tapers, pr jt..13c
6 in. Smooth T's ..27c
7 to 6 in. Planished Tapers.....45c

Yale Patent Lock Pipe—Stove.

	5"	5½&6"	7"	7 to 6"
	Cents			
Battle Ax Blue Smooth Steel.	6	6½	7½	8
Double Lock Peerless Blue Smooth Steel.	6¾	7½	8½	8¾
Can't Slip Blue Smooth Steel.	6¾	7½	8½	8¾
Duplex Polish'd Blue Smooth Steel.....	8¾	9½	10½	10¾
Yale Russia Fin	15¾	16½	17½	17¾
Plan'h'd Duplex	29½	30½	37	38
Galvano, Galvanized Iron..	15	16	17	17½

If wanted made up, add per joint for grooved, 1c; riveted, 1½c. Crating made-up pipe extra.

Wrought Iron Gas Pipe
⅛@½-in., black.....discount, 60%
⅝@½-in. ..... " 60,10&5%
¾-in. to 6-in.. black... " 70%
7 " 12 " .. " 62½%
⅛@½ galvanized " 42%
⅝@½ " " 50%
¾ " 6 " " 57½%
7 " 12 " " 45%

PLANES.

Sargent Iron Bench.....60%
Stanley Iron Bench.....25&5%

PLANTERS.

Corn.
Monitor.....per doz..$7 75
Triumph..... " .. 6 00
Segment..... " .. 9 00

Potato.
Acme.....per doz..$6 25
Challenge..... " ..11 00
Pingree..... " .. 3 25
Eureka ..... " .. 6 25

PLATES, TIN.

See Metals in Column 1.

PLIERS.

Button's—In. 4½ 6 8 10
Per doz.....$2.75 $3.25 $4.15 $5.15

Button's Pattern.
In. 4½ 6 8 10
Per doz.....$2.15 $2.40 $2.90 $3.75

Cutting.
Bernard's.....30%
Lodi.....50%

End and Diagonal Cutting.
Swedish Side 70%
Utica Drop Forge & Tool Co....50%

Fencing.
Farmers' Choice....per doz ..$8 00
Russell's..... " .. 8 25

Flat and Round Nose.
Bernard's.....30%
German 65%
Lodi.....50%
Paragon.....50%

Gas—In. 6 8 10 12
Per doz...$2.35 $3.00 $4.00 $5.00

Tinner's.
Hollow.... .....40%
Solid..... each..5½c

PLUMBS AND LEVELS.

Common.....60&10&10%
Cook's.....40%
Davis' Iron.....35%
Davis' Inclinometer.....15%

POINTS.

Drive Well Points.....75&5%

POKERS—STOVE.

Wr't Steel, str't or bent, pr doz.$0.55
Wr't Steel, wood hand'ls " " .80
Nickel pl'td, coil hdl's.. " " .65

POKES—ANIMAL.

Cracker Jack, wr't steel, per doz.... ....$4.50

POLISH.

Metal.
Pride of the Bar.....$1.60
Putz Cream.

Pts.	1-8	¼	½
Per doz.....	$0.80	$1.10	$1.65

Pts	1	2	8
Per doz	$2 75	$4.50	$7.50	$12.50

White Silk half pints, per doz.$3.00
White Silk, 6 oz. cans, per doz. 1.00
Wondershine

Pts.	1-6	½	1	2
Per doz.....	$0.70	$1.35	$2.25	$3.00

George William Hoffman.
U. S. Metal Polish Paste, 3 oz. boxes, per doz., 50c; pr. gro ..$4.55
½-lb. boxes, per doz..... 1.20
1-lb. boxes, per doz..... 2.25
U. S. Liquid, 8 oz. cans, per doz., $1.25; per gro.....12.00
Barkeepers' Friend Metal Polish, per doz., $1.75; per gro..18.00

Shoe.
M. D. C.....per doz. 36c@50c
F. C. O..... " 40c
T. M..... " 55c@$1.75
Imperial.....per gr.....$5.00

Stove.
Black Eagle, 1 ℔ cans. pr gr..$15.00
Black Silk—
5 ℔. pail.....$0 70
Paste, 5 oz. cans....per doz. 75
Paste, ½ lb. cans.... " 1 05
Liquid, ½ pint cans..per doz $1 00
Liquid, 6 oz. cans... " 75
Steel Range Gloss.... " 1 75
Blackene, 1 ℔ cans....pr gro. 13 00
Black Jack, ½ ℔ cans.. " 9 25
Dixon's Carb. of Iron.. " 5 75
Nickel Plate..... " 4 50

POPPERS, CORN.

Round or Square, 1 qt. per dz, ..$ 95
Square, 1½ qt..... " 1 10
Square, 2 qt..... " 1 25
2 qt. Reversible..... " 1 60

POTS, FIRE.

Bernz.....each $3 85
Clayton & Lambert's, ea..$4 75@6 25
Gate City.....each 6 25
Gem.....ea..$6 75@8 50

POWDER.

See Ammunition.

PRESSES, FRUIT AND JELLY.

Enterprise Manufacturing Co....25%
Henis .....per doz. $1 85

PRIMERS.

See Ammunition.

PRUNERS.

Disston's Pole.....per doz. $6 50
Henry's Improved..... " 75&10%
Water's Improved..... " 80%

PULLERS.

Cork.
Daisy.....each $3 10
Phoenix..... " 1 40
Quick and Easy..... " 2 70

Nail.
Giant.....per doz..$10 50
Giant Pattern..... " .. 6 00
Jumbo ..... " .. 9 00

Tack—Giant ..... " .. 40

PULLEYS.

Awning—Jap'd.....60%
Clothes Line.....50&10%
Hay Fork.
Iron Wheel, 5 in.....per doz. $1 75
Wood Wheel, 6 in.... " 1 75
Wood Wheel, 6 in., pass knot..... " 2 15
Hot House—Jap'd .....50&10%
Screw..... " 60%
Side ..... " .....50&10%
Sash.
Mark's .....per doz $0
Common Sense, 2 in .. "
" Pattern. 2 in.. "
Empire..... "
Ideal..... "

PUMPS

Pitcher Spout.

Nos.	1	2	3	4
Each	$1.10	1.23	1.40	1.85

Spray.
Blizzard.....per doz. $14 50
Cyclone, tin..... " 3 40
" copper ..... " 6 75
Daisy..... " 9 00
Little Giant.....each 2 25

PUNCHES.

Conductors'.
No. 22.....per doz. $2 25
Machine.....per ℔. 19
Saddlers'.
Common.....per doz. 60c@70c
Good..... " 73c@84c

PUTTY.

In Bladders.
Strictly pure.....per 100 ℔s. 2 25

RAIL.

Barn Door.
Crescent T..... ..... 4½c
Double Flange..... 3½c
Matchless, 1 in..... ..... 3c
Matchless, 1½ in..... 3½c
Storm King..... 4c
World's Best 7c

Sliding Door.
Painted steel.....per ft. 4½c
Bronzed wrought iron... " 8½c

RAKES.

Coal or Wood.....per doz. $5.20
Garden.
Steel.....70&10%
Steel, bow.....70&10%
Malleable Iron, heavy.....70&5%
Hay.
Wood.....$1.50@$3 00
Lawn—Wood.
XXX .....per doz. 3 00
Automatic ..... " 5 25
Lawn Queen..... " 3 00
Jumbo, 36 teeth..... " 5 50

RASPS—See Files.

RAZORS.

Bo-ras-ic 50%
Red Devil.....50%
Tree Brand.....50%

REGISTERS.

List December 5, 1904.
Black and White Japanned.....66⅔%
Nickel Plated.....66⅔%
Electroplated, Brass, Bronze or Copper.....66⅔%

RINGS

Bull.

	2½ in	3 in.
Copper.....		
Per doz.....	$1.40	$1.80
Rea's Impro'd Self Piercing copper, pr d'z.	2.00	
Steel per doz..	.85	.95
Nickel Plated	1.35	...

and Ringers—Hog.
Blair's Rings.....per doz. $0 58
Blair's Ringers..... " 75
Brown's Rings..... " 50
Brown's Ringers..... " 80
Champion Ringers... " 1 60
Hill's Ringers..... " 70
Hill's Ring, boxes..... " 47
Major Rings ..... " 60
Perfect Ringers..... " 95
Wolverine Rings..... " 1 40
Wolverine Ringers... 80
Fruit Jar.
White.....per ℔ 30c
Key.
Split, round.....per doz. 17c
Split, square..... " 32c
Ball, Round..... " 32c

RIVETS.

and Burrs.
Copper Belt 20%
Coppered Iron.....60&10&5%
Tinners' .....60&10%
Hame .....per ℔. $0 10
Slotted Clinch.....per doz. 40c@45c
Tubular.
Nos. 1 and 2 assorted sizes, doz. 45c

RIVET SETS.

See Sets.

ROPE.

Cotton.
¼, 5-16-in. Com. on reels..per ℔. 11½c
¼, 5-16-in. Com. in coils .. " 12c
¼, 5-16 Imperial in coils . " 21c
Sisal.
1st quality.....12 c
Hardware Grade, rates.per ℔. 10 c
Pure Manila.
1st quality..... " 15½c
Hardware Grade, rates. " 14½c

RULES

Boxwood.....60%
Ivory .....

SASH WEIGHTS.

See Weights

SAWS.

Back.
Disston's 35%
Jackson's.....25%
Butchers'.
Disston's.....30%
Circular.
Disston's.....50%
Hiles'.....50&10%
Compass.
Common.....per doz. $1.35@$1.60
Disston's.....25%
Cross-Cut.
Disston's.....45%
Dehorning.
Disston's..... " 5.75
Hack.
Disston's.....25%
Keystone.....30%
Hand and Rip.
Brown's 30%
Disston's No. 7.....30%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120 (new list) 25%
Keystone.....30%
Enterprise, hand.....per doz.$5 00
Our Saw, hand..... " 4 00
Our Saw, rip..... " 4 50
Keyhole—Disston's.....25%
Kitchen.
Sterling.....25%
One Man 50%
Panel.
Brown's.....30%
Disston's No. 7.....30%
Disston's No. D100.....25%
Pruning.
Brown's.....25%
Disston's.....25%
Wood.
Common.....per doz. $4 50
Clover Leaf..... " 6 50

SAW BUCKS—See Bucks.

SAW SETS—See Sets.

SAW TOOLS—See Tools.

SAW FRAMES.

Common, plain.....per doz. $1 25
" painted.... " 1 70

SCALES.

Counter.
Pelouze..... .....40&10%
Platform.
Osgood.....50%

SCOOPS.

Grain.
½ Bu. "Hercules,"..per doz. $13 70
1 " " " 15 00

SCRAPERS.

Box.
Triangular..... 4 00
Cabinet.
Cast Steel..... " 60c@75c
Road.

Cubic ft.	7	5	3
Without runners, ea.	$4.00	3.75	3.50
With runners.... "	4.25	4.00	3.75

SCREWS.

Bench.

Iron, in,.....	1	1½	1¾
	$3.50	$4.00	$4.75

Wood, white maple..per doz. $3 50
Hand—Wood.....10%
Hand Rail.....80&10%
Jack .....70&10&5%
Lag or Coach—all sizes, gimlet pointed.....75&5%
Saw—Centennial.

Nos.	1	2	3	4	5	6
Per doz.	18c	20c	26c	30c	23c	25c

Wood.
F. H. Bright.....87½&5%
R. H. Blued.....85%
F. H. Jap'd.....82½%
F. H. Brass.....85%
R. H. Brass.....80%
R. H. Nickel Plated.....75-10%

SCYTHES.

Clipper, grain.....per doz. $956
Clipper, grass..... " 6 27
Clover Leaf Dutchman " 0
Honest Dutchman..... " 7
BeVe B..... 90

SHAVING SETS.
Smith & Hemenway.....60%

SETS.
Nail.
Round, common.....per doz. $0 33
Square, " ..... " 42
Octagon " ..... " 33
No. 5 Square,..... " 75
Cup Point, knurled pr. doz..... 75
Bird.
Farmers'.....per doz. $1 20
Tinners'.....50&10%
Saw.
Aiken's Pattern.....per doz. $3 60
Common Lever..... " 1 20
Disston's Monarch..... " 6 50
" X Cut..... " 12 00
German ..... " 1 05
Morrill's Old Style..... " 5 00
" Pattern..... " 3 25
Leach's..... " 80
Nash's Hand..... " 3 15
" X Cut..... " 4 20
Stillman's Lever..... " 1 30
" X Cut..... " 2 50

SHARPENERS, SKATE.
Diamond.....per doz. $1 60
Smith & Hemenway.....30%

SHAVES, SPOKE.
Iron.....per doz. $1.10@$1.85
Wood..... " 2.75@ 4.75
Bailey's.....50&5%
Goodell's.....15%

SHEARS
Pruning.
Buckeye, No. 1.....per doz. $5 75
" No. 2..... " 7 40
California Pat. 9 in..... " 3 20
" " 10 in..... " 4 00
Draw Cut, No. 3..... " 13 75
" " No. 4..... " 16 50
Henry's Pat. 0 01 14 012
Per doz.....$1.40 $2.10 $2.90 $2.80
Star.....per doz. $4.00
Sheep—No. BBA.
Inches..... 6 6½ 7
Reg. Grip..... $11.25 $11.50 $12.00
Nar. Grip, doz. 11.00 11.25 12.25
Tinners'—See Snips.

SHEAVES, SLIDING DOOR.
Common.
Inches..... 3 4 5
Per set.....$0.34 $0.42 $0.70
Hatfield's.
Per set..... .75 1.00 1.60

SHELLS—See Ammunition.

SHELLERS, CORN.
Union..... per doz. $6.75

SHIELDS.
Expansion Bolt Shields.....50&10%

SHOES.
Conductor.....60&10%

SHOE POLISH—See Polish.

SHOT—See Ammunition.

SHOVELS AND SPADES.
Coal.
No. 2 Woodford .....per doz. $5 50
No 182. ..... " 6 00
Ames' new list.....Discount 12½%
Per Doz.
Neverbreak, hollow bck, blk. $15 75
National.... " " " 14 75
Buckeye .... " " " 10 00
Mohawk.... " " 9 00
Drain.
Iwan's Perfection.....50%
Railroad, Etc.
Black Diamond.....per doz $1 50
Crescent..... " 5 75
Keystone..... " 8 75
Star..... " 4 75
Vaterland..... " 9 50
Hollow Back..... " 4 75
Ame's new list.....Discount 12½%
Snow.
Per doz.....$1.65@$9.00
Alaska Steel.
D Handle.....per doz. $3 50
Long Handle..... " 3 00

SINKS.
Cast Iron.
Painted.....50&10%
Enameled, White.....50&10%
Wrought Steel.
Painted, new list.....40-10&5%

SLEDGES—See Hammers.

SNAPS, HARNESS.
Champion.....33⅓%
German Pattern.....30&5%
Judd's Pattern.....50%

SNATHS.
Double Ring, Bush.....per doz. $5 25
Patent Loop " .... " 4 75
" " Grass..... " 4 50

SNIPS, TINNERS'.
Wiss.....40%
National.....40&10%

SOLDER—See Metals.

SPRINGS, DOOR.
Perfect.
Nos..... 1 2 3 4
Per doz....30c 35c 40 45c
Reliance.
Per doz.....light $1.25; heavy $2.50
Star.
Per doz..... light 90c; heavy $1.35
Torrey's.....per doz. $1.35
Warner's No..... 11 13
Per doz..... 75c $1.35

SQUARES.
Steel and Iron.....70%
(Add for luing, $2.50 per doz., net)
Mitre.
Try.
Try and Bevel
Try and Miter.
Fox's.....per doz. $5.75
Winterbottom's 70%

SQUEEZERS, LEMON.
Common Wood.....per doz $0 70
Porcelain Lined, Wood. " 1 25
Boss, malleable iron.... " 1 20
Iron Frame, pr'n bowl " 1 90
" glass bowl.. " 2 35
Little Giant, tin'd iron. " 4 00
Drum, japanned..... " 3 60
Drum, nickel plated.... " 4 50

STAPLES.
Blind.
Barbed.....per ℔ 9½@9½c
Butter Tub..... " 8@8½
Fence—less than carload.
Polished.....per 100 ℔ $2 30
Galvanized ..... " 2 60
Netting.
Galvanized.....per 100 ℔ 4 00
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples.....80-10&10%
Extra heavy.....75&10%

STEELYARD.
Discount 25%.

STONES.
Axe.
Hindostan.....per ℔ 5½@7c
More Grit..... " 9½c
Washita..... " 17 c
Emery..... 60%@60&5%
Oil—Mounted.
Arkansas Hard.....per doz. $23 00
Arkansas Soft..... " 15 50
Hindostan .....per ℔ 6½@6½
Oil—Unmounted.
Arkansas Hard.....per ℔ $2 05
Arkansas Soft..... " 1 10
Lilly White..... " 45
Queer Creek..... " 15
Ouachita..... " 38
Washita ..... " 26
Sythe.
Black Diamond.....per gro. $8 00
Crescent..... " 4 25
Gem Corundum..... " 7 50
Green Mountain..... " 4 50
La Moille..... " 7 00
Quinnebog..... " 5 00
Red End..... " 3 75

STOPS, BENCH.
Hotchkiss'..... .....per doz. $3 50
Stearns'..... " 4 75

STOPPERS, FLUE.
Common.....per doz. $0 40
Crown..... " 45
Gem, flat, painted..... " 85
Gem, cor'd, decorated.. " 70
Kirch's..... " 90
Perfect..... " 70@85
Skinner's Common Sense " 80

STOVE PIPE—See Pipe.

STOVE BOARDS—See Boards.

STOVE POLISH—See Polish.

STRAPS.
Scoop.....per doz. prs. $1 85
Skate..... " " 60@70c

STRETCHERS.
Carpet.
Bullard's.....per doz. $3 90
Excelsior ..... " 5 25
Malleable Iron..... " 70
Perfection..... " 6 30
King..... " 4 50
Wire.
N. S. Elwood's..... " 6 00
O. S. Elwood's..... " 6 00
Little Giant .. .. " 5 75
Safety ..... " 10 00
Star Lever..... " 6 25
Canton Tackle Block. " 9 50
Warner's ..... " 6 25

SWIVELS.
Malleable Iron.....per ℔ 07
Wrought Steel.....per gro. $4 50

TACKS.
American Cut.....90&15%
American Wire.....85&20%
Bill Posters Cut.....60&20%
Blued Carpet.....90&10%
Tinned Carpet.....90&10%
Gimp.....90&10%
Upholsters' Cut .....90&20%
Upholsters Wire.....90&10%
Double Pointed.....90%
Copper.....per ℔ 22c
Canvas Nails.....75&5%
Clout Nails .....75&10%
Hungarian Nails.....80%

TAPES, MEASURING.
Asses' Skin.....40&10%
Bend Leather.....20%
Patent Leather.....20%
Lufkin's Steel.....25%
Lufkin's Metallic.....30%

TEE BEVELS—See Bevels.

THERMOMETERS.
Tin Case.....per doz. 80c@$1 25
Wood Back..... " $2.00@12 00
Glass..... " 12 00

TIES.
Bale.
Single Loop.....80&5%
Other kinds.....70%
Cow—See "Chains."

TOOLS, SAW.
Disston's Universal.....40%
Minature.
Smith & Hemenway.....25%

TRAPS.
Fly.
Balloon.....per doz. $1 15
Harper's..... " 1 25
Game.
Newhouse.....40&10%
New Victor.....70&10%
Mole.
Reddick's.....per doz. $8 00
Mouse and Rat.
Wood Choker...per doz. holes $0 13
Tin Choker..... " " 75
Delusion.....per doz. 1 15
Marty Rat..... " 6 25
Marty Rat Imitation.. " 3 50
Marty Mouse..... " 3 00
Marty Mouse Imitation " 2 00
Hold-em, wire rat.... " 3 75

TROWELS.
Brick.
Clover Leaf.....33⅓%
Brade's.....15&5%
Disston's.....30%
Rose's.....25%
Plasterers.
Clover Leaf.....40%
Disston's.....25%
W. & McP.....25%

TRUCKS.
Bag.....each $0 75
Handy..... " 1 85
Warehouse.....50&10%
No..... 1 2 3
Half Ironed.... $3.00 $3.85 $5.50
Full Ironed.... 3.45 4.50 6.45

TUBS, WASH.
Standard, Wood Ex.
Nos..... 3 2 1 large
Per doz....$5.00 $6.00 $7.00 $ 9.50
Dowell.
Per doz.... 5.35 6.35 7.00 9.50
Cedar.
Per doz.... 6.10 7.10 7.90 10 80
Indurated.
Per doz.... 8.55 9.45 10.80 13.50
Galvanized.
No..... 1 2 3
Per doz.....$6.00 $6.75 $7.75

TWINE.
Per ℔
3-ply Cotton Wrapping.....35c
4 " " " 35c
4 " " Extra Wrapping.....27c
4 " " " Hvy. Wrapping..35c
4 " " Wrapping on tubes...27c
3 " " " " cones...25c
4 " " " " " ...25c
India Hemp, ½-lb. balls.....19c
" " ¼-lb. " 18c
" " ½-lb. " .....doz. 75c
2-ply Jute, ½-lb. " 14c
3-ply " ½-lb. " 13c
Jute Wrapping, ½-lb. balls.....14c
Jute Wool, 1-℔ balls.....9½c
Seine
Nos..... 9 12 15+
Soft.....per ℔ 26½ 26 25
Med..... " 26½ 26 25
Hard..... " 27 26½ 26
Staging, ½-lb. ball, size 21.....26½c
" " " " 24.....26c
" " " " 27.....26c
Bagging " 23c
3-ply "B" in hanks.....18c
4 " "B" " 18c
3 " "A" 27c
3 " Silver Finish, in hanks....37c
Fodder or Lath
180 strand 6½c
0 20 strand. 7

VISES.
Phoenix.....30%
Cheney's 20%
Parker's Oval Slide.....50, 10&2½%
Phoenix Oval Slide,
In. 2½ 3 3½ 4½
Ea. $1 35 $1 50 $1 85 $2 75
Parker's Parallel.....18&20%
Parker's Victor.....15%
Parker's Combination.....75%
Solid Box..... ....40&5%
Adam's Mechanics'.....each 2 50
Williamson Universal.....60%

WARE.
Stove Hollow Ware.
Plain or Unground.....50&10%
Ground Ware.....40&10%
Enameled Ware.....40%
Country Hollow Ware, per 100 lbs. $3 00
White Enameled Ware.
Maslin Kettles .....65&5%
Covered Ware, Tin'd and Turn'd 35-10%
Enameled.....45&10%
Glue Pots, Tinned.....30%
Enameled.....35%
Enameled.
Cherry Blossom and Chrysolite.50%

WASH BOARDS—See Boards.

WASHERS.
Standard O. G. cast iron...per ℔. 2½c
Wrought iron in bulk per ℔.:
In. ½ ⅝ ¾ ⅞ 1 1¼ 1½ 2
9c 6½c 5c 4½c 4½c 4½c 3½c 3½c
Wrought steel in 5 ℔. boxes, per ℔.
In. ½ ⅝ ¾ ⅞ 1 1¼ 1½ 2
10c 7c 6c 5½c 5c 5c 4½c 4½c

WASHING MACHINES—See Machines.

WEDGES.
Ax.....per doz....30
Galling .....per ℔ 10½
Saw ..... " 8½

WEANERS.
Calf.
Fuller's, per doz.....$2 00 to $2 50
Tyler's Safety, per doz 1 85 to 2 40
Carroll's, per doz..... 3 00 to 3 75
Standard, per doz..... 3 00
Hoosier, per doz..... 3 50 to 4 00

WEIGHTS.
Hitching .....per ℔ 2½c
Sash—F.O.B. Chicago...pr ton $27 50

WHEEL BARROWS.
Common Railroad....per doz..$15 50
Heavy " .... " .. 20 00
Panama Steel Tray " .. 35 00
Klondike " " .. 23 50
No. C4 Tubular " 43 Bryan..each 4 60
No. C5 " " 45 " " 5 25

WHEELS.
Corundum .....70&10&5%
Emery .....75&5%
Well In. 8 10 12 14
Per doz.....$2.10 $2.50 $3.15 $5.00

WIRE.
Barbed Painted. Galv'd.
Carloads..per 100 lbs..$2.60 $2.90
Less than car " .. 2.65 2.95
Brass.
In coils.....20%
In 1 ℔ spools, new list.....50%
Broom—Tinned.....60&10&10&10%
Cable—Same price as Barbed Wire.
Copper.
In coils.....20&10%33⅓%
1 ℔ spools, new list .... 50&10%
Fence—Smooth.
Nos. 6 to 9, An'eal'd, pr 100 lbs. $2.30
Nos. 6 to 9, Galvl'd... " 2.60
Hair—New list.....50%
Market.
Bright, full bdles.....70&5%
Bright, broken bdles 70%
Coppered, full bdles.....70%
Coppered, broken bdles.....65&10%
Tinned, full bdles.....70&5%
Tinned, broken bdles.....65&10%
Picture—In coils.....80%@80&10%
In 5 ℔. spools. .....per ℔..26c
Plain—Small lots.....$2.10
Car lots 2.05
Small spools 5c per hundred higher.

WRENCHES.
Acme Standard.....60%
Alligator No. 1.....85c net
Always Ready.....50%
Coe's Standard.....40&10&5%
Agricultural.....70&10%
Ellis Adjustable.....35%
Malleable "S".....per ℔. 08c
Malleable..... " 08c
Stillson Pipe.....70%
Trimo " .....65&10%

WRINGERS.
No. 22, Guarantee....per doz.$32 50
No. 110, Guarantee.... " 32 50
No. 110, Brighton..... " 28 50
No. 110, Bicycle ..... " 31 50
No. 500, Royal ..... " 32 50
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Johns-Manville Co., H. W., Pittsburg, Pa.

Adding Machines

Automatic Adding Machine Co., New York

Ash Sifters

Hill Dryer Co., Worcester, Mass

Ammunition

Marlin Firearms Co., New Haven, Conn
Peters Cartridge Co., Cincinnati, O
Remington Arms Co., New York, N. Y
Stevens, J. Arms & Tool Co., Chicopee Falls, Mass

Boilers—Steam

Boynton Furnace Co., Chicago, Ill
Thatcher Furnace Co., Chicago, Ill

Bolts

Columbus Bolt Wks., Columbus, O
Star Expansion Bolt Co. New York, N.Y

Boxes—Hardware

Green, A. H., New York

Brass and Copper

Hungerford, U. T., Brass & Copper Co. New York, N. Y

Cans

Peoria Can Co., Peoria, Ill

Carpenter Benches

Grand Rapids Hand Screw Co., Grand Rapids, Mich

Carpenters' Tools

Davis & Cook, Watertown, N. Y
Duby & Shinn Mfg. Co., Branchport Station, Long Branch, N.J
Griffin Mfg. Co., Erie, Pa
North Bros. Mfg. Co., Philadelphia, Pa

Carriage Forgings

Columbus Bolt Works, Columbus, O

Ceilings

Berger Mfg. Co., Canton, O
Burton, W. J. Co., Detroit, Mich
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Friedley-Voshardt Co., Chicago, Ill
Keighley Met. Ceiling Co. Pittsburg, Pa
Milwaukee Artistic Metal Ceiling Co., Milwaukee, Wis
Northrop, Coburn & Dodge Co., New York
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn
Wheeling Corrugat'g Co., Wheeling, W. Va

Carriers—Stove

Kramer Bros. Fdy. Co., Dayton, O

Cement—Plumbers

Obermayer Co., S., Cincinnati, O

Cement Roofing

Conners, Wm. Paint Mfg. Co. Troy, N.Y

Chains

Bridgeport Chain Co., Bridgeport, Ct
Oneida Community, Oneida, N.Y

Chains—Jack and Safety

Hungerford, U. T. Brass & Copper Co., New York

Clips—Carriage Trimmer's

U. S. Clothes Pin Co., Montpelier, Vt

Clothes Dryers

Hill Dryer Co., Worcester, Mass
Mannen & Esterly, Cleveland, O
Martcross Co., Chicago

Clothes Pins

U. S. Clothes Pin Co., Montpelier, Vt

Coil Springs

Pullman Mfg. Co., Rochester, N.Y

Commode Pails

Pierce & Laux. Burlington, Iowa

Conductor Hangers

Berger Bros. Co., Philadelphia, Pa

Conductor Pipe

Berger Mfg. Co., Canton, O
Canton Mfg. Co., Canton, O
Clark, Quien & Morse, Peoria, Ill
Eller Mfg. Co., Canton, O
Friedley & Voshardt, Chicago, Ill
La Crosse Steel Roof. Co., La Crosse, Wis
Milwaukee Art. Met. Ceil. Co., Milwaukee, Wis
Reeves Mfg. Co., Canal Dover, O
Schoedinger, F. O., Columbus, Ohio
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Cookers—Steam

Ohio Cooker Co., Toledo, O

Copper and Brass

Hungerford, U. T., Brass & Copper Co., New York, N. Y

Corn Cribs

Denning Wire & Fence Co., Cedar Rapids, Ia

Cornices

Berger Mfg. Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Schoedinger, F. O., Columbus, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Cornice Brakes

Bertsch & Co., Cambridge City, Ind
Dreis & Krump Mfg. Co., Chicago
Niagara Machine & Tool Wks., Buffalo, N.Y

Cutlery

Weiss, L. T. Brooklyn, N.Y

Cut Offs—Rain Water

Cooney & Geiger, Indianapolis, Ind
La Crosse Steel Roof. Co., La Crosse, Wis
Milwaukee Art. Met. Ceil. Co., Milwaukee, Wis

Dampers

Howes, S. M., Co., Boston, Mass
Sayre Stamping Co., Sayre, Pa

Dictionaries

Ogilvie, Geo. W., Chicago, Ill

Eaves Trough

Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Iwan Bros., Streator, Ill
La Crosse Steel Roof. Co., La Crosse, Wis
Milwaukee Artistic Metal Ceiling Co., Milwaukee, Wis.
Schoedinger, F. O., Columbus, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn
Whitacre, J. E. Mfg Co., Rockford, Ill
Wheeling Corrugating Co., Wheeling, W. Va

Elbows

Diener Mfg. Co., Geo. W., Chicago

Elbows—Conductor Pipe

Canton Mfg. Co., Canton, O
Dieckmann, F., Cincinnati, O
Milwaukee Art. Met. Ceil. Co., Milwaukee, Wis.
Eller Mfg. Co., Canton, O
Reeves Mfg. Co., Canal Dover, O
Wheeling Corrugating Co., Wheeling, W. Va

Elbows—Stove Pipe

Diener, Geo. W. Mfg. Co., Chicago
Reeves Mfg. Co., Canal Dover, O

Electro Plating Outfits

Hanson & Van Winkle Co., Chicago, Ill
Zucker, Levett & Loeb, New York City

Elevators

Kimball Bros. Co., Council Bluffs, Ia

Enameled Ware

Lisk Mfg. Co., Canandaigua, N. Y
Paxton & Gallagher Co., Omaha, Neb
Star Enameling and Stamping Co., Pittsburgh, Pa

Fencing—Wire

Denning Wire & Fence Co., Cedar Rapids, Ia
Pittsburgh Steel Co., Pittsburgh, Pa

Files

Carver File Wks., Philadelphia, Pa
Disston Henry & Sons, Philadelphia, Pa

Firearms

Marlin Firearms Co., New Haven, Conn
Remington Arms Co., New York, N.Y
Stevens, J. Arms & Tool Co., Chicopee Falls, Mass

Firearms—Accessories

Marlin Firearms Co., New Haven, Conn
Remington Arms Co., New York, N.Y
Stevens, J. Arms and Tool Co., Chicopee Falls, Mass

Forming Rolls

Bertsch & Co., Cambridge City, Ind
Niagara Mch. & Tool Wks., Buffalo, N.Y

Foundry Supplies

Obermayer, S. Co., Cincinnati, O
Stevens, F. B., Detroit, Mich

Furnaces—Gas

Blickelhaupt Skylight Works, New York
Mannen & Esterly Co., Cleveland, O

Furnaces—Hot Air

Beckwith, Estate, P. D. Dowagiac, Mich
Bonnot Co. Canton, O
Boynton Furn. Co., Chicago
Chappell Furnace Co., Morenci, Mich
Cox, Abram, Stove Co., Philadelphia, Pa
Green Fdy. & Furn. Wks., Des Moines, Ia
Haynes-Langenberg Mfg Co., St. Louis
Henry & Scheible Co., Cleveland, O
Hess, Snyder Co., Massillon, O
Kelsey Heating Co., Syracuse, N. Y
Lennox Furnace Co., Marshalltown, Ia
Mannen & Esterly Co., Cleveland, O
May & Fiebeger Akron, O
Monroe Fdy. & Furn. Co., Monroe, Mich
Mueller, L. J. Furn. Co., Milwaukee, Wis
Peck-Hammond Co., Cincinnati, O
Ralt, Walter S. & Co., Chicago
Robinson Furnace Co., Chicago
Schwab, R. J. & Sons Co., Milwaukee, Wis
Smith, Chas., Co., Chicago, Ill
Stove & Range Co. of Pittsburgh, Pittsburgh, Pa
Wise Furnace Co., Akron, O
Youngstown Furn. & Supply Co., Youngstown, O

Furnaces—Tinners'

Bickelhaupt Skylight Works New York
Clayton & Lambert Mfg. Co., Detroit
Diener, Geo. W., Mfg. Co. Chicago
Turner Brass Works, Chicago

Furnace Pipe and Fittings

Green Fdy. & Furn. Wks., Des Moines, Ia
Michigan Safety Furnace Pipe Co., Detroit, Mich
Mueller, L. J. Furn. Co., Milwaukee, Wis
Robinson Furnace Co., Chicago, Ill
Smith, Charles Co., Chicago

Furnace Rings

Walworth Run Fdy. Co., Cleveland, O

Glass

Powers & Williams, Streator, Ill

Hand Screws

Grand Rapids Hand Screw Co., Grand Rapids, Mich

Hand Punching Machines

American Lock Nut Co., Oregon, Ill

Door Hangers

Safety Door Hanger Co., Ashland, O

Hangers—Eaves Trough

Beutel & Co., Cleveland, O
Schoedinger, F. O., Columbus, O

Hangers—Garment

Pullman Mfg. Co., Rochester, N.Y

Hardware Jobbers

Clark, Quien & Morse, Peoria, Ill
Paxton & Gallagher Co., Omaha, Neb

Hardware Specialties

Butler Bros., Chicago, Ill
Carver File Co., Philadelphia, Pa
Enterprise Mfg. Co. of Pa., Philadelphia, Pa
Holt-Lyon Co., Tarrytown, N. Y
Peck, Stow & Wilcox Co., Cleveland, O
Pullman Mfg. Co., Rochester, N. Y
Smith & Hemenway Co., New York, N. Y

Heaters Hot Water

Boynton Furnace Co., Chicago, Il
Smith, Chas. Co., Chicago

Heating

Detroit Heating & Lighting Co., Detroit, Mich
Kellogg-Mackay-Cameron Co., Chicago
Kelsey Heating Co New York City
United States Reg Co., Ltd., Battle Creek, Mich

Hinges

Griffin Mfg. Co., Erie, Pa
Lawson Mfg. Co., Chicago

Hollow Ware

Avery Stamping Co., Cleveland, O
Sperry, D. R. & Co., Batavia, Ill

Horse Nails

Standard Horse Nail Co., New Brighton, Penna

Ice Chests

Success Mfg. Co., Gloucester, Mass

Ice Cream Freezers

North Bros. Mfg Co., Philadelphia. Pa
Richmond Cedar Wks., Richmond, Va

Kitchen Utensils

Avery Stamping Co., Cleveland. O
Holt-Lyon Co., Tarrytown, N. Y
Lalance & Grosjean Mfg. Co., Chicago
Lisk Mfg. Co., Canandaigua, N. Y

Lanterns

Berger Mfg. Co., Canton. O
Pritchard-Strong Co., Rochester, N. Y

Lawn Mowers

Clipper Lawn Mower Co., Dixon. Ill
Philadelphia Lawn Mower Co., Philadelphia, Pa

Levels

Baker-McMillen Co., Akron, O
Davis & Cook, Watertown, N. Y

Lightning Rods

Foy & Co., Edw. A., Cincinnati, O
Maner & Son Lightning Rod Co., Preston, Iowa
Security Lightning Rod Co., Burlington, Wis

Mail Boxes

Blick-Williams Co., Indianapolis, Ind
Signal Mail Box Co Joliet, Ill

Metal—Perforated

Harrington & King Perforating Co., Chicago, Ill

Metal Polish

Hoffman, Geo. W., Indianapolis, Ind

Metal Shingles

Burton, W. J. Co., Detroit, Mich
Cortright Metal Roofing Co., Philadelphia
Nat'l Sheet Metal Roof. Co., Jersey City
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Miters

Whitacre, J. E. Mfg. Co., Rockford, Ill

Mop Heads and Handles

Eagle Cooperage Wks., Circleville, O

Mop Wringers

Eagle Cooperage Wks., Circleville. O

Nails and Tacks—Copper

Hungerford, U. T., Brass & Copper Co., New York

Nickel Plating Plants

Hanson & Van Winkle Co., Chicago
Zucker & Levett & Loeb, New York, N.Y

Nuts

American Lock Nut Co., Oregon, Ill
Columbus Bolt Works, Columbus. O

Ornaments—Sheet Metal

Gerock Bros. Mfg. Co., St. Louis, Mo

Ovens

Huenefeld, E. H. & Co., Cincinnati, O

Paints and Paint Specialties

Buckeye Paint & Varnish Co., Toledo, O
Connors, Wm., Paint Mfg. Co., St. Louis
Dixon, Jos. Crucible Co., Jersey City, N. J
Pitkin Co., Geo. W. Chicago

Patterns

Gray, G. L., New York, N. Y
Probert School of Instruction The E. R., Cincinnati, O

Pencils

Dixon, Jos. Crucible Co., Jersey City, N.J

Perforated Metal

Harrington & King Perforating Co., Chicago, Ill

Photograph Clips

U. S. Clothes Pin Co., Montpelier, Vt

Pistols

Stevens, J. Arms & Tool Co., Chicopee Falls, Mass

Polish

Hoffman, Geo. W., Indianapolis, Ind
Nickel Plate Stove Polish Co., Chicago

Post Hole Augers

Iwan Bros., Streator, Ill

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Berger Mfg. Co., Canton, O
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Niagara Mch. & Tool Wks., Buffalo, N.Y

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Disston, Henry & Sons., Philadelphia, Pa

Razors

Kampfe Bros., New York, N.Y
Smith & Hemenway Co., New York, N.Y
Weiss, L. T., Brooklyn, N.Y

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Henry & Scheible Co., Cleveland, O
Mueller, L. J., Furn. Co., Milwaukee, Wis
Schwab & Sons Co., Milwaukee, Wis
Symonds Mfg. Co., E. St. Louis, Ill
United States Register Co., Ltd., Battle Creek, Mich

Register Faces

Wooden Ventilator Co., East Palestine, O

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Marlin Firearms Co., New Haven, Conn
Remington Arms Co., New York, N. Y
Stevens, J. Arms & Tool Co., Chicopee Falls, Mass

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Columbus Bolt Works, Columbus, O
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Stowell Mfg. Co., Jersey City, N.J

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Milwaukee Art Metal Ceiling Co., Milwaukee, Wis
Nat'l Sheet Metal Roof. Co., Jersey City
Reeves Mfg. Co., Canal Dover. O
Schoedinger, F. O., Columbus, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul. Minn
Sykes Steel Roofing Co., Chicago, Ill
Wheeling Corrugating Co., Wheeling, W. Va

Roofing Cement

Connors Paint Co., The Wm., Troy, N.Y
Taylor Co., N. & G., Philadelphia, Pa

Roof Paint

Dixon, Jos. Crucible Co., Jersey City, N.J

Rules

Lufkin Rule Co., Saginaw, Mich

Sash Balances

Pullman Mfg. Co., Rochester. N.Y

Sausage Stuffers

Enterprise Mfg. Co. of Pa., Philadelphia, Pa

Saw Sets Saws and

Disston, Henry & Sons, Philadelphia, Pa
Goodell-Pratt. Greenfield. Mass
Smith & Hemenway Co., New York

Screens—Perforated Metal

Harrington & King Perforating Co., Chicago, Ill

Screen Door Checks

Pullman Mfg. Co., Rochester, N. Y

Screws

Columbus Bolt Works, Columbus, O

Screw Drivers

North Bros. Mfg. Co. Philadelphia, Pa

Scuttle Openers

Bickelhaupt, G., Skylight Works, New York, N. Y

Seamless Tubing—Brass & Copper

Hungerford, U. T., Brass & Copper Co., New York

Shears

Bertsch & Co., Cambridge City, Ind

Shears—Sheet Metal

Niagara Mch. & Tool Wks., Buffalo, N.Y
Weiss, H. & Co., New York, N.Y

Sheets—Black and Galvanized

Berger Mfg. Co., Canton. O
Taylor Co., N. & G., Philadelphia, Pa
Wheeling Corrugat'g Co., Wheeling, W. Va

Sheet Metal Patterns

Gray, G. L., New York

Sheets—Planished

American Sheet & Tin Plate Co. Pittsburgh, Pa
Ward-Dickey Steel Co., Indiana Harbor, Ind

Sheets—Steel

American Sheet & Tin Plate Co., Pittsburgh, Pa
Taylor Co., N. & G., Philadelphia, Pa
Ward-Dickey Steel Co., Indiana Harbor, Ind

Shot Guns

Stevens J., Arms & Tool Co., Chicopee Falls, Mass

Shovels

Avery Stamping Co., Cleveland, O

Siding

Milwaukee Art. Met. Ceil. Co., Milwaukee, Wis

Skylights

Burt Mfg. Co., Akron, Ohio
Eller Mfg. Co. Canton. O
Milwaukee Art. Met. Ceil. Co., Milwaukee, Wis
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Skylight Gearing

Bickelhaupt, G., Skylight Works, New York, N. Y
Weiss, H. & Co., New York, N.Y

Slate

Auld & Conger Co., Cleveland, O

Solder

Taylor Co., N. & G., Philadelphia, Pa

Squares, Machinists'

Disston, Henry & Sons, Philadelphia, Pa
Duby & Shinn, Branchport Station, Long Branch, N. J

Stampings—Sheet Metal

Avery Stamping Co., Cleveland. O

Stoves and Ranges

Beckwith, P. D. Estate, Dowagiac, Mich
Champion Steel Range Co., Cleveland, O
Cultor & Proctor, Peoria, Ill
Glazier Stove Co., Chelsea, Mich
Huenefeld, E. H. Co., Cincinnati, O
National Stove Co., Lorain, O
Reeves, S. V., Philadelphia, Pa
Schneider & Trenkamp Co., Cleveland, O
Stove & Range Co. of Pittsburgh, Pittsburgh, Pa.
Union Stove Works, Massillon, O
Willard, Wm. G., St. Louis, Mo

Stove Cement

Dixon, Jos. Crucible Co., Jersey City, N.J

Stoves—Gas

Stove & Range Co. of Pittsburgh Pittsburgh, Pa

Stove Patterns

Cope Pattern, Geo. W. Wks., Detroit, Mich
Quincy Pattern Co., Quincy, Ill
Vedder Pattern Works, Troy, N.Y
Weller Pattern Co., Quincy, Ill

Stove Pipes

Hemp & Co., St. Louis, Mo
Reeves Mfg. Co., Canal Dover, O

Stove Pipe—Nested

Reeves Mfg. Co., Canal Dover, O

Stove Repairs

Brauer, A. G., St Louis, Mo
Dust, Wm. T. & Co., Detroit, Mich
Reeves, S. V., Philadelphia, Pa

Stove Trimmings

Troy Nickel Works. Troy, N.Y

Sugar Kettles

Sperry, D. R. Co., Batavia, Il

Tanks

St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Tapes

Lufkin Rule Co., Saginaw, Mich

Technologist

Hooper, C. N. Dubuque, Iowa

Test Tube Holders

U. S. Clothes Pin Co., Montpelier, Vt

Thermometers—Oven

Evans Stamping & Plating Co., Taunton, Mass

Tin—Perforated

Harrington & King Perforating Co., Chicago, Ill

Tin and Terne Plate

National Ass'n of Master Sheet Metal Workers, Pittsburg, Penna
Taylor Co., N. & G., Philadelphia, Pa

Tools—Linemen's

Smith & Hemenway, New York

Tinners' Tools

Berger Bros. Co., Philadelphia, Pa
Lufkin Rule Co., Saginaw, Mich
Niagara Machine & Tool Works, Buffalo, N. Y
Smith & Hemenway Co., New York
Taylor Co., N. & G., Philadelphia, Pa

Tinplate

Canton Art Metal Co., Canton, O
Eller Mfg. Co. Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Merchant & Evans Co., Philadelphia, Pa
Schoedinger, F. O., Columbus. O
Taylor Co., N. & G., Philadelphia, Pa
Wheeling Corrugating Co., Wheeling, W. Va

Tinware Trimmings

Berger Bros. Co., Philadelphia
Butler Bros., Chicago

Tools, Etc.

North Bros. Mfg. Co., Philadelphia, Pa

Trough Hangers

Beutel & Co., Cleveland, O

Trowels

Avery Stamping Co., Cleveland
Disston, H. & Sons, Philadelphia, Pa
Griffin Mfg. Co., Erie, Pa

Tubing—Brass and Copper

Hungerford, U. T., Brass & Copper Co., New York

Ventilators

Burt Mfg. Co., Akron, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Friedley & Voshardt. Chicago Ill
Galesburg Cornice Wks., Galesburg, Ill
Globe Ventilator Co., Troy, N Y
Merchant & Evans Co., Philadelphia, Pa
Powers Bros. Streator, Ill
Pullman Mfg. Co., Rochester, N. Y
Schoedinger, F. O., Columbus, O

Wagons

Sycamore Wagon Wks., Sycamore, Ill

Wagon Jacks

Stoltz, J. R., Cudahy, Wis

Washers

Columbus Bolt Works., Columbus, O

Washing Machines

Blackstone Mfg. Co., Jamestown, N.Y
Bramner, H. F., Mfg. Co., Davenport, Ia
Easy Washing Machine Co., St. Mary's, O
Hawkeye Incubator Co., Newton, Ia
Paxton & Gallagher Co., Omaha, Neb
Richmond Cedar Wks., Richmond, Va
White Lily Washer Co., Davenport. Ia and Toledo, O

Wire Goods

Denning Wire & Fence Co., Cedar Rapids, Ia
Pittsburgh Steel Co., Pittsburgh, Pa

Wants and Sales

For Yearly subscribers THE AMERICAN ARTISAN will insert under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

BUSINESS CHANCES.

PATENTS

HUBERT E. PECK, 623 F. St., N. W. Washington, D. C. Consulting Expert in Patent Causes. U. S. and Foreign Patents. Send for leaflet on "Rejected Patent Application."

For Sale—A new clean stock of hardware and notions. Stock opened up three years ago. This is a fine opening for any one, especially one who speaks German, as the trade is largely German. Stock will invoice about $4,000 with fixtures. Will sell building or will rent same. Rent $150 per year. Price of building, $1,500. No better location in the town. Population 400. Fine grain point. Four elevators, four churches, good schools. As fine surrounding country as is found anywhere; can't be beat. Annual sales, $12,000 to $15,000 per year. No trade; want money. Address D 44, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 18-3t

For Sale—Complete hardware stock. Old stand. Complete set of tinners' tools. Wagon, harness, etc. Apply 431 Milwaukee Ave., or 38-40 Michigan St., Chicago. 17-3t

For Sale or Part Trade—A well improved 320 acre farm in Dickinson county, Iowa. Good soil, one of the best farms in the county. Will take $5,000 cash, $11,000 mortgage at 5 per cent, rest in stock of hardware or on easy terms. Address D 43, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 17-3t

Wanted—To rent with privilege of buying same, a tin and plumbing shop, by a middle-aged man who can run same. Can do ordinary plumbing, steam and hot water heating, hot air heating and general job work in sheet metal. Prefer location in Middle Western States in connection with good reliable hardware concern. Would accept a situation in the above lines, if wages were satisfactory. Address H, 1114 Eighth St., Clinton, Ia. 17-2t

Opening Wanted—To start a stove and plumbing business. Have complete set of tools for both plumbing and heating and a good clean stock. Might consider partnership of a practical man. Address D 44, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 17-3t

For Sale—One-half interest in good paying hardware store, thirty-five miles west of Chicago. Good hustling town. Good factories. Plenty of work the year around. 5,000 population. Stock about $8,000. Good reasons for selling. Write for particulars. Address Preston Hird, St. Charles, Ill. 16-3t

For Sale—A first-class stove and tin store with a good tin shop in connection. Well equipped with tools. Old reliable business stand. Selling on account of death of owner. Address, Mrs. M. L. Boyer, West Liberty, Ohio. Box 81. 16ufn

For Sale—A clean and profitable hardware and furnace business. Established 1893. Population about 7,000. Best location in the city and one of the best arranged stores in the state. Will turn over contracts and will make it of interest to some one looking for a good business. Poor health is my reason for selling. Address, J. V. Hyder, York, Neb.

For Sale—Clean, up-to-date stock of hardware including stoves, paints, oils and tin shop. Best proposition in Wisconsin. Town growing rapidly. Good schools, good churches and fine farming country. Invoice about $3,500. Cash deal only considered. Investigate. Address Koenig and Dunn, Gillett, Wis. 16-3t

For Sale—A rare chance to buy an up-to-date hardware store. Clean stock. Paying business. Good town and fine farming country. Honorable competition. Price not demoralized. Requires about $7,000 for stock with building and lot. All up-to-date and best location in town. Part time if wanted. No trade considered. Stock about $5,000. Building and lot 24x140. Fine rooms on second floor and a bargain at $2,000. Write or call on J. W. Leighton, Livermore, Iowa.

For Sale—Tin, cornice and furnace shop at a bargain in one of the best towns in the state of Colorado. An average business of $8,000 a year. A1 field for out of town. Reason for selling, altitude too high for family. Address D38, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 16ufn

For Sale—A clean and profitable hardware, heating and plumbing business, established in 1888. Will invoice about $7,000. Population 6,000. Sudden death of both members of firm reason for selling. Excellent opportunity. Address Box 147, Cedar Falls, Iowa.

TINNERS' TOOLS.

For Sale—A complete set of tinners' tools, all in good condition, and a lot of miscellaneous patterns used in the ordinary job shop. Make me an offer. Address D 42, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 17-3t

Wanted—Full set of tinners' tools in good condition. State make and price. Address Herman Reinsdorf, 1015 Prairie Ave., Kenosha, Wis. 17-2t

For Sale—Almost a full set of tinners' tools. Will sell each tool or machine separate. Tools almost new. Address A. G. Brenner, Brownton, Minn. 16-3t

Wanted—A double seaming machine. Must be in good condition and cheap. Address Nims Brothers, Norton, Kans. 15-3t

HELP WANTED.

Wanted—Good tinner and furnace man. Steady job to right man. Address D 47, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill.

Wanted—A bright young man who has had experience as a tinner, to install lighting plants. One with experience preferred. Give references and wages wanted. Address H. F. Strehlow, Casselton, N. D. 18-3t

Tinner Wanted—At once, good inside and outside man. The best of wages to the right party. Address Flanegin Hardware Company, Logansport, Ind. 18ufn

Wanted—A good all around tinner who can assist in store. Must speak German. Steady work the year around to the right man. Must give references. No boozer need apply. Married man preferred. State wages. Address, W. R. Yahr, Princeton, Wis. 18-3t

Wanted—At once, a good tinner and furnace man. Steady work and good wages to the right man. Address R. M. Calkins, Rochelle, Ill. 18-3t

Wanted—At once, a first-class plumber who can also do steam fitting and furnace work, in northeastern Iowa town of 2,500. State age, experience and full particulars in first letter. Steady job for the right man. Address Garmen and Forkenbrock, New Hampton, Iowa. 17-3t

Wanted—An A1 tinner. Inside and outside man. One who understands plumbing; also hot water, steam and hot air heating. None but steady, temperate mechanics need apply. Address I. D. Hayden, Sun Prairie, Wis. 17-3t

Wanted—A good all around tinner for jobbing shop, in town of 22,000. One who can cut his own patterns. Must be steady and temperate. State wages desired. Steady work to the right man. Address J. H. Mitchell, 423 South 12th St., Richmond, Ind. 17-2t

Wanted—A first-class tinner, plumber, hot water and furnace man combined. Will pay the best wages to the right man that will take a permanent job. Send references and state wages wanted. Address, Hunter Brothers, Cando, North Dakota.

Wanted—First-class all round tinner. Good wages and steady job to right man. Must understand furnace and hot water work. Give full particulars as to experience. Address, The Huber-Wolfe Hardware Company, Port Clinton, Ohio. 16-3t

Wanted—At once, a tinner in country town for general work at good wages. Address, T. B. Bennett & Company, Flanagan, Ill. 16-3t

SITUATIONS WANTED.

Wanted—Salesmen who call on the best hardware trade to sell our stove specialty as a side line; big demand and good commission. Only first-class men with representative firms desired. Replies treated confidentially. Address D 45, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 18-3t

Situation Wanted—As tinner with some good hardware or hardware and implement firm in the west. Montana or Washington state preferred. Can also do plumbing, set up machinery and almost any kind of windmill or pump work. Address D 46, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 18-3t

Situation Wanted—By a young man with two years' experience in tinshop and taking a course in sheet metal drawing. Address D 49, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 18-1t

Position Wanted—By a young tinner with three years' experience. Can do hot air heating. Would like to work as second tinner under a first class tinsmith. Wisconsin preferred. Address D 40, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 17-3t

Situation Wanted—By first-class mechanic as tinner, working six days a week. Address D 39, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 17-3t

Wanted—Position after May 1st by first-class tinner and furnace man. Can do pipe fitting and help in store if wanted. Address D 41, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 17-3t

Wanted—By a man of twenty years' experience, a job in shop or shop and store. Am a good all around tinner; a fair hardware man, or in other words can earn my wages either in shop, store, office or implement shed. Prefer the Central States, but will go anywhere. Address B, care of Kolb Hotel, Baker City, Ore.

Situation Wanted—By young man who will finish his apprenticeship as a tinner July 11th. Would like to work in or near Chicago or in Iowa. Can do all that comes to a country shop. Pipe-fitting, roofing, spouting, pump and wind mill work; also had a little furnace work. Age 21. German and willing to work. Want steady job the year around. State wages. Will be ready any time between July 15th and August 1st. Address Charles J. Bothfield, Cleveland, Wis. 17-2t

Situation Wanted—By a practical all around tinner with fifteen years' experience at the trade. I can install hot air furnaces, also can do ordinary plumbing work such as installing bath tubs, lavatories, closets, etc. I am a man of good habits and am so situated that I can report for work on short notice. Address Box 56, Farmington, Iowa.

SPECIAL NOTICES.

TINSMITH WANTED

for Alberta; one who can do furnace work and general work. Wages to start, $3.50 per day. Apply direct to Hicks & Wakely, Lethbridge, Alberta or Merrick-Anderson Co., Winnipeg, Manitoba. 18-2t

PARTNER WANTED

to take stock in well established tin shop business. Will require from $500 to $1,000 capital. Want active, energetic, sober, industrious and experienced tinner to take charge of shop. My reason for wanting a man of this kind is, I am too busy attending to other lines of the business to give the tinshop the attention it should have. It has always been a paying department of my business. Address J. ED. GUENTHER, Owensboro, Ky. 18-1t

"New 80-page Catalogue Free"

We have just issued a new book, finely illustrated and beautifully printed. It is a veritable mine of information in the vital and interesting subject of Ventilation, and is full of handsome illustrations and useful data concerning

The Burt Ventilators

A very large number of fine illustrations showing the Burt Ventilators installed on important buildings and the opinions of men who are today using them on mills, factories, shops, foundries and residences are also given a place in this book as being extremely valuable to the prospective buyer.

Notice Sliding Sleeve Damper. Patented.

Send a postal today for a copy

The Burt Mfg. Co.

650 Main Street, Akron, Ohio.

Largest Manufacturers of Oil Filters and Exhaust Heads in the World.

SPECIAL NOTICES

WANTED

A superintendent and practical tinner who can make correct estimates on all kinds of sheet metal specialties. To the right man a financial interest will be given in an established business well located. Address "B-65," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 17-2t

WANTED

Tinsmith wanted for Manitoba. $20.00 week. Steady work providing satisfactory. Write Curry & Mitchell, Souris, Man., or Merrick-Anderson Co., Winnipeg, Man., stating Furnace experience. 17-2t

WANTED

Salesmen thoroughly experienced with sheet metal lines for territories in Iowa, Kansas, Oklahoma and Missouri. Address "B-63," THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 17-2t

WANTED

First class tinner to act as foreman of established furnace pipe establishment. One who can lay out sheet metal patterns, and who has some knowledge of setting dies. Good salary and steady position to right man. Address, stating experience, etc., to Michigan Safety Furnace Pipe Co., corner Brooklyn and Abbott Sts., Detroit, Mich. 17-2t

WANTED

Tinsmith for Manitoba with hardware experience. Good opportunity for the right man. Apply to Merrick-Anderson Co., Winnipeg, Manitoba. 17-2t

WANTED

Hardware Stock. Have a well located improved farm to exchange for a stock of hardware or hardware and implements. Give full particulars as to stock and business in first letter. Address, "B-64," THE AMERICAN ARTISAN, 69 Dearborn St., Chicago 17-4t

WANTED

First-class Cornice Makers immediately. WILLIS MFG. CO., Galesburg, Ill. 15ufn

WANTED

I can pay the highest market prices F. O. B. your city, for all kinds of old metals, such as copper, brass, zinc, lead, babbitt, skinnings, etc. Drop a line and I will be glad to name my best prices.
H. KANDER, Bowling Green, Ohio. 3-ufn

WANTED

Side line salesmen to call on Hardware, Tin, Stove and House Furnishing trade for an all metal Bread and Pastry Board. Good Commission. W. H. Hartley & Sons, Cambridge Ohio. 11-ufn

Foreman Wanted

To take charge of factory making tinware specialty; one accustomed to dies and presses. Good salary and desirable position for capable man. State experience. Address "Foreman," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 16-ufn

Special Notice

HAVE HAD CONSIDERABLE experience calling upon stove manufacturers and hardware jobbers. Can handle specialty to good advantage. Am desirous of making a change. Address "P. D. Q." care of THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago. 8-ufn

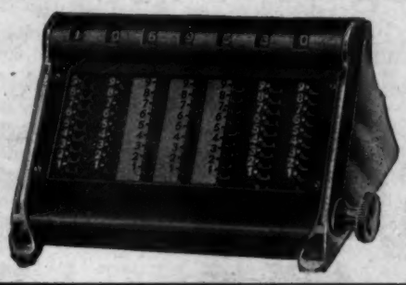
WANTED

men everywhere to take up slate roofing business in **UNOCCUPIED TERRITORY.** Either cities, towns, or country districts. For live, energetic men this is a gilt-edged proposition, affording an opportunity to secure plenty of work, good profits and to establish a paying business. Only a few simple tools needed. Can be carried on in connection with hardware or tinning business. As best roofing material known SLATE is coming into universal use, and a good slate roofing business can be developed anywhere by right men. For further details write immediately to

THE AMERICAN SEA GREEN SLATE CO.
Box 33. GRANVILLE, NEW YORK.

$15 "GEM" Adding Machine

OVER 3,000 IN USE IN THE HARDWARE TRADE



With a Resetting Device that clears the dials to zero instantly. A High Grade Mechanical Production. Does the work of High Priced Machines. **Carries Totals** automatically. Clears to zero automatically.

ADAPTED TO ALL LINES OF BUSINESS

Let Us Send You One on a 10 Days' Trial, at Our Expense

Address Mr. A. I. GANCHER

AUTOMATIC ADDING MACHINE CO.

332 BROADWAY - NEW YORK CITY

SPECIAL NOTICES.

WANTED

Six good tinners at once for Central Wisconsin town. No combination men need apply. Address "B-56," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 11-ufn

Special Notice

We want to get in touch with a good jobber or warehouse to distribute our stoves throughout the Northwest. Address with full details, "B-60" care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 16-ufn

I WOULD LIKE to have **a good sheet iron worker** in each town in the U. S. manufacture for me a patent article **to supply the trade in his town and neighborhood.** Device made of Galvanized Iron; can be built in any good sized tin shop; **good demand** for it; **good profit** in making it: can be worked into a good business. Address R. M. 312 Merrill Building, Milwaukee, Wis.

The *Marlin* Model '92, .32 caliber, uses .32 short and long rim-fire, also .32 short and long center-fire cartridges all in one rifle. These cartridges are satisfactory in every way but much lower in price than other .32's.

This *Marlin* is the only repeater made for these sizes. It is much more effective than a .22 caliber on such game as hawks, owls, foxes, woodchucks, squirrels, geese, etc.

Described in detail in our complete 136-page catalogue, mailed free for six cents postage.

The Marlin Firearms Co.,

95 Willow Street, New Haven, Conn.

Gray's Perfect Blue Print Patterns for Sheet Metal Work

160 elbow patterns, from 1 inch to 40 inches, and angle chart	$3.00
Full set of skylight patterns, for 1 inch bar and skylight chart	2.00
Full set of skylight patterns, for 1½ inch bar and skylight chart	2.50
Full set of skylight patterns for 2½ inch bar and skylight chart	4.00
Full set of skylight patterns, for 3½ inch bar and skylight chart	4.50
Full set of Turret skylight patterns, to operate by gearing	2.00
Full set of (Louver) skylight patterns, to operate by cord and pulley	2.00
Full set of Balustrade patterns and full sized detail	3.00
Full set of Letter and Figure patterns, from 3½x5 to 18x20 inch	$2.00
Full set of Liquid Measure patterns, from 1 gill to 1 gallon	1.00
Full set of Ventilator patterns, from 6 inch to 20 inch and F. S. detail	2.50
Full set of Ventilator patterns, from 20 inch to 36 inch and F. S. detail	3.00
Full set of Metal Window patterns and detail for sliding sash	6.00
Full set of Metal Window patterns and detail for Casement window	6.00
Full set of Metal Window patterns, pivoted top sash, stationary bottom sash	5.00
Full set of Metal Window patterns, pivoted top and bottom sash	5.00

Write for Circulars Giving Full Description to

G. L. GRAY, 1028 Jackson Ave., New York

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One who watches carefully the pages of general advertising mediums is struck by two things: the persistency with which those advertisers who are recognized as successful maintain their advertising week after week, month after month, and year after year; they never seem to abate their effort, and apparently the volume of their business increases steadily. The other thing noticeable is the large number of advertisers who thrust their announcements above the surface for a little while and then sink into oblivion. They either had not merit as a basis for their claims or they did not possess the skill to steer their enterprise successfully, or else they lacked the nerve to put forth proper effort.—[*Advertising Experience.*

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Lesson in Sheet Metal Pattern Cutting.

Write to-day—Address

The E. R. Probert School of Instruction

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DIXON'S

Ticonderoga Flake Graphite reduces friction losses in cylinders, bearings, and at all friction points. Get free sample 18-C.

Joseph Dixon Crucible Co., Jersey City, N.J.

The OLD RELIABLE STAR SAFETY RAZORS

Used for a quarter of a century by men of all nations.

Move all the time; invariably satisfies the customer.

The SECRET
The 3 STARS BLADE

Manufactured under a process peculiar to Kampfe Brothers.

Highest Award Wherever Exhibited:
Paris, 1900 Buffalo, 1901 St. Louis, 1904 Portland, 1905

Write for Quotations and Secure an Agency.

KAMPFE BROTHERS,

Manufacturers. **8-12 Reade Street, NEW YORK**

THE SHAVEZY GUARD

May be adjusted to any blade,
Instantly changed from right to left.
Is the best and a Cheap Guard.

Get my prices, which are right.

L. T. WEISS, Sole Manufacturer
288-290 Taaffe Place, BROOKLYN, N.Y

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SECURE
PROTECTION AND LONG SERVICE BY USING OUR
ASPHALT ROOFING
SAVES REPAIRS---
SAVES RECOATING-
SAVES RENEWING-
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JERSEY CITY, N.J.

You Don't Have To Take Our Word For The Reliable Goodness Of

Coat=Roid Rubber Roofing

Nor do you have to ask your customer to depend on your simple assertion that is alright. We will give you

A WRITTEN GUARANTEE

to be handed anyone who wants to be "shown." We agree to furnish new roofing FREE if COAT-ROID proves defective, and we will protect you and your Customer just as absolutely as COAT-ROID will protect the building.

ASK ABOUT OUR EXCLUSIVE AGENCY PROPOSITION.
THERE'S MONEY IN IT FOR YOU!

St. Paul Roofing, Cornice and Ornament Co.

Everything in Sheet Metal **ST. PAUL, MINN.**

It Will Pay You

to illustrate your advertisements in your local papers. A sheet of comic advertising cuts sent on application.

These cuts are furnished with catchlines showing their application to the hardware, stove and tinners' trades.

ADDRESS

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69 Dearborn St., - CHICAGO

Plecker's *Corrugated* Expanding *Conductors*

Have no Cross Seams. Made of Galvanized Iron in ten-foot lengths. [redacted] Will not burst when full of ice.

CLARK, QUIEN & MORSE, PEORIA, ILL.

THAT "BRAUER'S"

is the best place to buy Stove Dealers' Supplies, Castings and Repairs of All Descriptions ?

Prices are lowest—Prompt Shipment.

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316-318 NORTH THIRD ST., - - ST. LOUIS, MO.

Trade HADDON Mark

S. V. REEVES

No. 50 N. 2nd St., Philadelphia

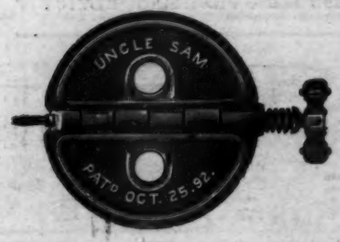
Manufacturer

TRADE V MARK

The LEIBRANDT & McDOWELL STOVE CO.'S STOVES and REPAIRS

NONE BEATS THE

Uncle Sam Damper



It is light, easily adjustable and enduring. The plate is stamped from best nickeled steel and is corrugated to prevent warping The stem consists of forged steel sharply pointed, notched to engage edge of plate, and is held absolutely in place.

Nothing better on the market
Send for free sample

SAYRE STAMPING CO.
SAYRE, PA.

THE RIGHT KIND
of Oven Thermometer is

THE "Acme"

THE "Acme"

MADE BY EVANS STAMPING AND PLATING CO. TAUNTON, MASS.
Western Agent, C. H. MATTHEWS, Detroit, Mich.

LOW VOLTAGE GENERATORS
For Electroplating.
Rheostats, Voltmeters and Electrical Instruments.
Complete Outfits for Electro-Galvanizing
Bolts, Nuts, Screws, Locks, Staples, Chains and Small Hardware
Complete Nickel-Plating Plants Furnished
Polishing Supplies of All Kinds
THE HANSON & VAN WINKLE CO.
(ESTABLISHED 1820)
219-221 Market Street, Newark, N. J., U. S. A. — Branch: Chicago, Ill., U. S. A.

U.S. INFALLIBLE METAL POLISH

Highest Awards:—Chicago World's Fair, 1893; Louisiana Purchase Exposition, St. Louis, Mo., 1904.
IN PASTE, LIQUID OR POWDER
FOR ALL KINDS OF METALS
Best, Cheapest, Goes Farthest. Never dries up or shrinks. Money makers for everybody. Sold by the jobbing trade. Samples free by mail. Address
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BRANCHES
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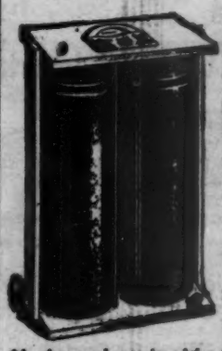
119 East Madison St., CHICAGO, ILL.
506 Montgomery Ave., SAN FRANCISCO, CAL.
Established 12 Years.



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Russia finish, pat. lock
STOVE PIPE.
It is made of a very high grade of uniform color Blue Polished Steel, and is coated to prevent rusting. Made in all sizes.
Packed twenty-five and fifty joints to crate. For sale by the jobbing Hardware Trade throughout the United States.
MFD. BY
HEMP & CO.
2nd & Chouteau Ave.
ST. LOUIS.
In the event your jobber does not handle this pipe send your inquiries to us.

PATTERNS
— THE —
CLEVELAND CASTINGS PATTERN CO.
Successors to
The GOBEILLE PATTERN COMPANY, Cleveland, Ohio
The LARGEST PATTERN WORKS in the World

PATTERNS
For Stoves and Heaters
First-class in wood and Iron.
Vedder Pattern Works, Troy, N. Y.
Established 1855

The GEO. W. COPE Stove Pattern Works
Cor. Brush & Woodbridge Streets
DETROIT, MICHIGAN

WELLER PATTERN CO.
DESIGNS and ESTIMATES FURNISHED FOR ALL KINDS OF STOVE PATTERNS
QUINCY, ILL.

QUINCY PATTERN CO.
IRON & WOOD
STOVE PATTERNS
QUINCY, ILL.

Our stock of
SHEET COPPER
is larger and more complete in variety of sizes and kinds than that of any manufacturer in the country, comprising an assortment of
OVER 150 SIZES
and aggregating over
300,000 POUNDS

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SHEET COPPER
U. T. HUNGERFORD BRASS & COPPER COMPANY
497-505 PEARL ST. NEW YORK 37-43 PARK ST.

Our stock includes
SOFT COPPER
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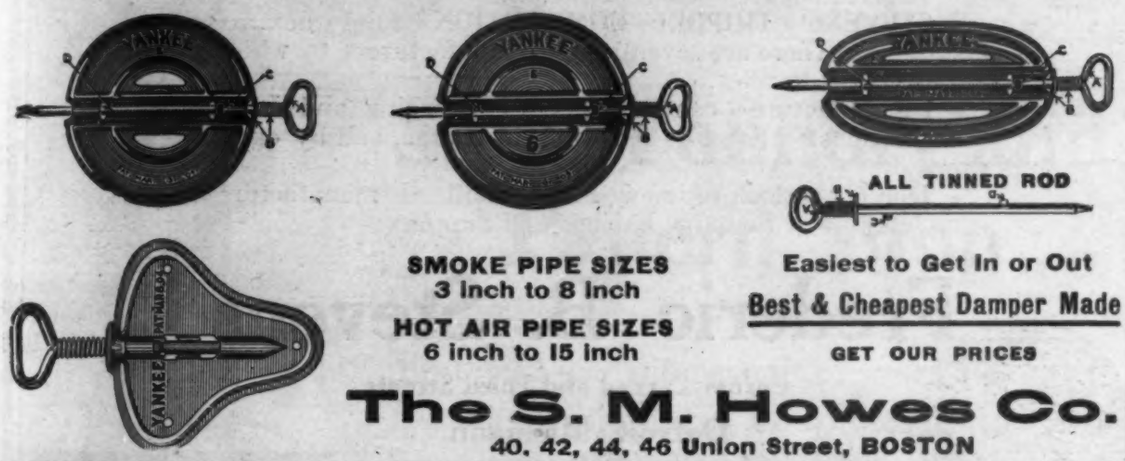
All stock sizes of above, either TINNED OR PLAIN, on hand in New York ready for immediate shipment

STOCK SHEET SHOWING FULL ASSORTMENT ON HAND, SENT ON REQUEST.

YANKEE DAMPERS and CLIP (All Steel)



SMOKE PIPE SIZES
3 inch to 8 inch
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Easiest to Get In or Out
Best & Cheapest Damper Made
GET OUR PRICES

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SAMPLE FREE

The "ALASKA"
never heats. The best constructed and most ornamental
STOVE TRIMMINGS
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yet produced.

"ALASKA"—the name tells the story.
MANUFACTURED ONLY BY
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Detroit is the Stove Center of the country. We job *original repairs* for all stoves made here. We furnish them quick, too. Try us.
For stoves *not* made in Detroit, we handle burning out parts only. Want quotations?
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The Fulton Hardware Co., Portland, Ind., write:
"Please discontinue our want ads for tinner and plumber, as we have received more replies than we can take care of at present."

THE REEVES MANUFACTURING COMPANY
CANAL DOVER, OHIO
Manufacturers of CORRUGATED, PLAIN ROUND and SQUARE CONDUCTOR PIPE

LAP AND SLIP JOINT EAVES TROUGH,
CONDUCTOR ELBOWS AND SHOES, CUT-OFFS, MITRES, DOVER WIRE HANGERS,
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DOVER NESTED STOVE PIPE AND DOVER ELBOWS
QUICK SHIPMENTS! SUPERIOR GOODS! LOWEST PRICES!

Stevens' Silver Finish!

The success of the stove making fraternity throughout this great and glorious country may be due in part to the way they dress up things with nickel plated trimmings.

The beauty of any nickel plate is greatly enhanced by the use of STEVENS' SILVER FINISH. Wherever a brilliant finish is required nothing else is as good—especially where there are deep backgrounds liable to be filled, particles so left are easily washed out.

It gives pocket-book satisfaction.

STEVENS' TRIPOLI COMPOSITION suits the most fastidious. There are several large manufacturers to whom I am at liberty to refer.

I manufacture a complete line of Polishing and Plating Compositions. Samples sent without charge, and by express prepaid.

Don't overlook my new Facing Mill. I manufacture a complete line of Foundry Facings and Supplies.

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Corner Larned and Third Streets

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Note our Method of Extracting Cork

A guaranteed silver plating compound that cleans and plates silver in one operation.

NON-POISONOUS—INODOROUS—STAINLESS

Reverses old method now in use by putting on silver instead of scouring it off.

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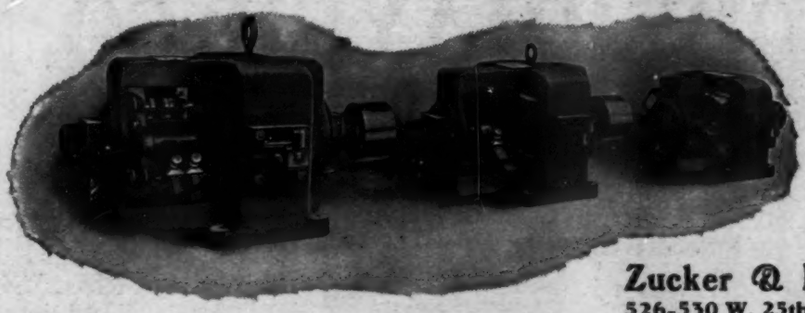

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ALL SIZES

We manufacture everything required for polishing and plating.

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Being said every day about what good materials we manufacture for the

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You will be interested in our Foundry Facings, Plumbago, Graphite, Putty and Supplies of Every Description. In fact we have

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And can ship you whatever you want the same day your order is received.

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When you are writing a letter of introduction,
When you are requesting payment of a debt,
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When you are writing a draft to your own order,
When you are making an agreement for hiring a workman,
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When you are making a merchandise broker's contract,
When you are applying for incorporation papers,
When you are taking a note from a married woman,
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METAL CEILINGS
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Represent the highest achievement in mechanical construction and artistic merit. Perfect in fit, quality and ornamental detail.

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Perfection in Metal Ceilings

THE GOODS MANUFACTURED BY

FRIEDLEY-VOSHARDT CO.

ARE IN A CLASS BY THEMSELVES
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ROOFINGS AND SIDINGS
STEEL CEILINGS
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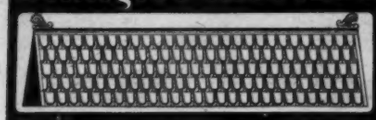
Shingles that last



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Do you want to increase your business? This is Your Opportunity. Write for catalogue, samples and prices.

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Big Money For Dealers

in Metal Ceilings, Side Walls and Tiling for use in Stores, Factories, Homes and every kind of a building, old or new—if you sell NORTHROP Steel Ceilings and Walls.

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Ask for Catalogue

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YOUR PROFITS on a job of metal ceiling depend upon the time occupied in the erection. If the plates do not fit, and the alignment is bad, it means your profit will be small and you will present an unsatisfactory job to your customer. Better be on the safe side and buy "Canton" Metal Ceilings, the profit sharing kind

Our book "Art in Metal Ceilings" is yours. Write for it.

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The illustrations well convey to the mind of the man experienced in hanging eave trough, its

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NO TOOLS ARE REQUIRED
in applying to the trough. The top band is heavily reinforced, making a perfect brace.

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Now on the face of it that doesen't look very encouraging for the tinner, yet hundreds of tinners would tell you they'd rather have an order to lay Cortright roof than one of plain tin, if you want to know why write. Send for 56-page booklet—"Rightly Roofed Buildings"—free.

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FLOOR GLASS
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At Prices that will Interest You

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WE MINE OUR OWN SLATE

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Our designs are very artistic, composed of the latest patterns. Easily and quickly applied.

Write for prices and illustrated catalogue, or send us measurements for estimate.

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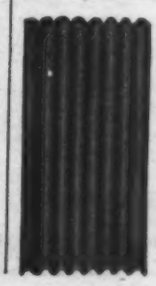

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We are large manufacturers — small profits, many sales.

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Mfrs. Steel Roofing, Corrugated Iron, etc.

HAVE YOU EVER HEARD OF A TARRED RAG ROOFING WITH A GUARANTEE LIKE THIS?

A PURE RE-HAMMERED CHARCOAL IRON BASE AND ALL THE COATING THAT CAN BE PUT ON IT

New York
Boston
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THE BERGER MFG. CO., CANTON, OHIO

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A building covered with Roofing Tin takes the lowest rate of Insurance, while one covered with shingles, slate, slag, gravel or composition roofing is forced to pay a greatly increased rate because of the great fire risk.

This applies in every city in this country and throughout the agricultural district as well and, therefore, is a fact well worth your consideration if you are about to build.

There is nothing inflammable about a Tin Roof, and firebrands falling thereon will soon burn themselves out. In our experience, we never knew a building covered with Roofing Tin to ignite from the top, while we have daily brought to our attention buildings covered with slag, gravel and composition roofs which have been completely destroyed through a spark falling upon the inflammable substances which are embodied in these roofing materials.

Not only does a Tin Roof give absolute protection to the upper surface of the building, against fire from without, but it confines and smothers the flames should fire start within the building. This is a very important point, particularly in closely built-up sections. Should the walls collapse the Tin Roof will often sink down, practically intact, blanketing the flames, and preventing the strong upward draft which occurs where a roof is burnt through.

A Circular which we have recently issued treats upon this subject with greater detail, and we shall be glad to send it to you if you will write to our President, 2213 Chestnut Street, Philadelphia, Pa.

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CONDUCTOR ELBOWS

WITH

TRADE F. Dieckmann MARK

have gone up and will continue to go up on all classes of work as

90%

of the SHEET METAL WORKERS realize that this is the ONLY PERFECT ELBOW. It is made of one piece of metal and having no Cross Seams and no Lock Seams does not interfere with rapid work. It is the elbow which is completed and made to fit in the works, and therefore requires no cutting, fitting or soldering ON THE JOB. Cost a few pennies more per dozen, but save you dollars on the Job. Write for Samples and Catalogs.

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FERDINAND DIECKMANN

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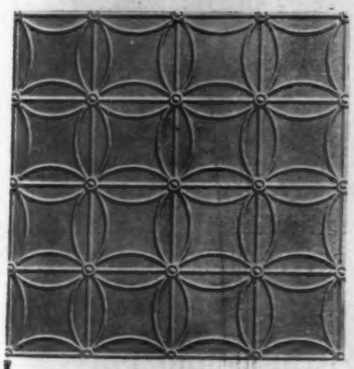

Lock Joint Metal Ceiling

Just now there is an immense amount of building, and more demand than ever before for metal ceiling.

Are you getting your share of this increased business?

Your opportunities are far better for getting your share, and more, too, if you handle the best material. We are willing to help you get this business.

The dust-proof and air-tight construction of the Lock-Joint Metal Ceiling makes it without an equal.

As it requires but four nails to a panel and no cross strips, you will appreciate the ease and rapidity with which Lock-Joint is erected.

You'll be pleased with Lock-Joint and so will your customers.

Would you like an exclusive agency?

Write to-day for catalogue "D."

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SIX STANDARD PRODUCTS

USED BY ALL THE LEADING STOVE AND RANGE MANUFACTURERS:

W. Dewees Wood Company's Patent Planished Iron.
Wood's Cleaned Refined Smooth Finish.
Hammered Polished Steel.
Wood's Oak Stove Body.
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AMERICAN SHEET & TIN PLATE COMPANY

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THE CHEAPEST— FIRST CLASS ELBOWS MADE

Adjustable Elbows—neither too loose nor too tight. Indispensable in putting up eave-spouting, stoves and furnaces, where odd turns or angles are to be fitted. These elbows come in sizes ranging from 1½ to 10 inches; made of Charcoal, Planished or Glavanized Iron.

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SHEET METAL AND HARDWARE SPECIALTIES
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Stamping Roofing Plates

"Reg. in U. S. M&E Pat. Off."

with brand or weight of coating is not the only protection due the architect, property owner and tinner.

The Process by which tin and lead is made to stick to the black plate, using palm oil as a flux, and not acid as a flux; the assortment, and the reputation of the manufacturer, count for more.

Stamping the "American Eagle" on a piece of brass does not make a "gold dollar," therefore, the brand does not carry the only security.

The "Merchant's old method" carries the test of time and the maker's reputation with it.

No wasters or seconds of this plate sold.

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Successors to MERCHANT & CO., Inc.

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For Lawns, Fire Escapes, Window Balconies and Piazzas

BEST AND MOST POPULAR DRYER IN THE WORLD

Samples to Dealers at Trade Prices.

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that will not scorch or burn even the most delicate dainty sauce or gravy. Will not absorb grease or flavor. Does not get smeary, dirty, unsanitary. Always clean, sweet, hygienic. Never warps.

"NEVER-BREAK"

Name always stamped on the handle.

You should have our complete catalogue.

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EXCLUSIVE MANUFACTURERS.

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A Plumber's Cement that Needs No Caulking

Those hard-to-get-at, awkward places are easy to fix if you try the modern, simple way. Use

National Plumbers' Cement

and make joints that will stay tight—that can't get loose—that do away with any possible chance of sewer gas leaks.

Get FREE Booklet 156-A

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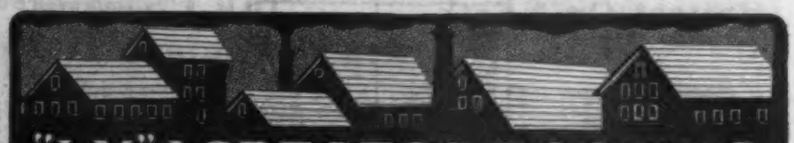

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A Pointer for You

The indications are that the coming season will see a far greater demand for prepared roofings than ever before.

"J-M" Asbestos Roofing is certain to lead all others in sales. It possesses highest fire-resisting properties, is proof against moisture, acids and gases, and does not require painting to preserve it.

Better be prepared—put in a stock of "J-M" Asbestos Roofing today.

Write nearest Branch for Special Dealer's Proposition.

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(463(

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CRATED READY FOR SHIPMENT **NO SOLDERING NO LEAKS** **NO PUTTY**

Can be shipped anywhere safely at a low freight rate. Can be set up by anyone. Write for Catalogue.

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A residence at Dunkirk, N. Y., was covered with "TARGET AND ARROW Old Style" tin 23 years ago. That roof is still in perfect condition.

TARGET AND ARROW Old Style roofing-tin is handled by all leading hardware jobbing houses throughout the United States.

Note that we now use the old name for the brand—"TARGET AND ARROW Old Style,"—rather than the words "Taylor Old Style," which have been imitated in every possible way by other tinplate houses.

Send for our "Guide to Good Roofs," giving arguments in favor of tin roofing

N. & G. TAYLOR COMPANY

Established 1810 Philadelphia

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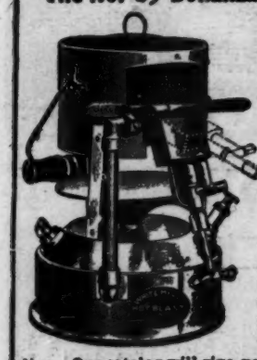
Write: Please take our advertisement out of your paper for 7-foot Robinson Cornice Brake. We are getting too many answers.

Hottest On Earth.
The No. 39 Bonanza Furnace



That is what we give you when buying a No. 39 Furnace for all around work. The tank is made of seamless drawn brass. We make many styles of Furnaces and Torches for kerosene as well as gasoline. Our catalog will give you full particulars. Order through any jobber, or send us $4.50; we will ship direct.

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"We Must Say That the No. 1 Fire Pot Has No Equal"

This is invariably the report we receive from the users. Mechanics who know say, "We cannot afford to use other makes if they cost nothing." Why not profit by their experience. Remember that the No. 1 Fire Pot will enable any mechanic to do more and better work and will save the user its cost in the saving of gasoline. You buy fuel continually.

No. 1 Fire Pot. $6.00 Net

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For Heating Soldering Coppers.

Will heat 5-lb. coppers in a few minutes. Neat, clean and so constructed that no dirt can get into burner to clog it and obstruct the flame. **Price $2.50 f. o. b. New York.**

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PROTECTION AND LONG SERVICE BY USING OUR
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HOLT'S Improved DOVER
Egg Beater & Cream Whip
Guaranteed to Beat EGGS to Perfection in 20 Seconds
The Flared Dasher Does It
WASH SOON AS USED BY TURNING IN WATER.

The above on a Tag is wired to every Egg Beater made by us.

The Holt No. A Egg Beaters are much larger and heavier every way than any 10 cent Dover made.

Retail Price 15 Cents, worth 25 Cents.

The Dashers are wider, thicker and flared ¼ inch. Made in 10, 15, 20 and 25 cent size. 5 years on the market.

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Draw on the Chimney

for a larger draft by mounting it with

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Sizes, 6 to 12 inches. Sold by jobbers of hardware and tinners' supplies.

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Manufacturers of Hardware Specialties

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Full measure, guaranteed perfect original patterns, with metal distributed where it is needed. Many Caldrons are made from our casting as patterns. They are inferior to originals, as they have light bottoms and heavy sides and hold less.

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STRAP & T HINGES
Pressed
Steel Shelf
Brackets

BUTT HINGES
Barn Door
Hangers
and Track

Our Planished Steel **STRAP and T HINGES** are now all made on Automatic Machinery—Every one is as true as a Die.
Our **BUTTS** are unequalled in Workmanship and Finish, All our Goods Guaranteed—**BEST IN THE WORLD.**
(And they cost no more.)

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"UNIVERSAL"
Screen Door Catches

Are Superior to All Others

Made from the **very best STAMPED WROUGHT STEEL,** in **Old Copper Finish.** Automatic Friction Catch with stop holds door firmly shut. Locks from inside. Unequaled for **Simplicity, Strength, Durability and Convenience.**

VERY EASILY PUT ON

No Mortising or Cutting for either lock or striker. Sold by all leading jobbers, or direct from

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THE PECK, STOW & WILCOX COMPANY
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LOWEST PRICED LOCKING SCREEN DOOR CATCH ON THE MARKET

DO YOU KNOW **Pierce's Patent Commode Pail**

COMMODE PAIL

is the only one having a latest improved closet seat which need not be removed when cleansing. Seat is on outside of body with braces riveted to side of pail. Made of galvanized iron painted and decorated in assorted colors or finished in white enamel. Packed one fourth dozen per crate.

Get a trial order from your jobber and we assure you, that you will buy none other. If you do not find them better than any made to-day, you may return them to us and we will pay your bill.

FOR SALE by the jobbing trade only.

PIERCE & LAUX
Manufacturers of **Hardware Specialties** Sell to Jobbers Only
BURLINGTON -:- -:- -:- IOWA

EARL'S IMPROVED REVOLVING VENTILATOR

Runs in a self-lubricating bearing that is not affected by heat or cold, and never requires any oil or grease. The Fan revolves without any noise, producing a current of air upward, which positively prevents any down draft. Write for circular.

BERGER BROS. CO.
TIN PLATE, SHEET IRON, ETC
PHILADELPHIA

Clipper Lawn Mower Co. DIXON, ILL.

Manufacturers of Hand and Pony Mowers, also Marine Gasoline Engines from 2 to 8 horse power.

THE MOWER
That will kill all the weeds in your lawns

If you keep the weeds cut so they do not go to seed, and cut your grass without breaking the small feeders or roots, the grass will become thick and the weeds will disappear. **The Clipper will do it.** If you wish Clippers, send in your orders.

Star Spraying Machines

For Whitewashing, Painting, Spraying of Insecticides, Etc., Etc.
15 DIFFERENT STYLES AND SIZES.
Write for Prices and Catalogue "G."
STAR BRASS WORKS, Sole Manufacturers, 12-14 S. Jefferson St., Chicago

Magic Pattern Rule

Will Lay Out Patterns for any size and angle of elbows in three minutes' time. Can also be used as Straight-edge Rule, Circumference Rule and Trammel. Should be in every Tinshop. Will save its cost in a few weeks. Thousands are in use and every one giving excellent satisfaction.

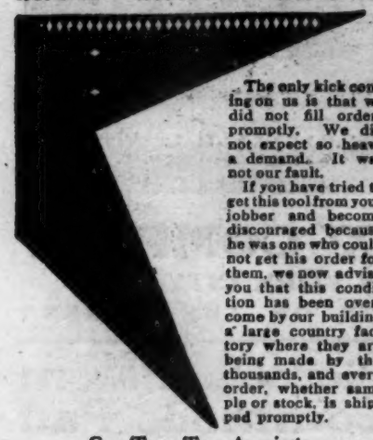
Price, complete in a nice wooden box with Chart, $4.00 net cash.

LUFKIN RULE CO., Saginaw, Mich. (Mention THE AMERICAN ARTISAN.)

The NEW Universal Square

Is proving itself sure to become the Standard Tool of its kind.

MADE IN THREE SIZES:
No. 6-6" No. 10-10" No. 13-13"



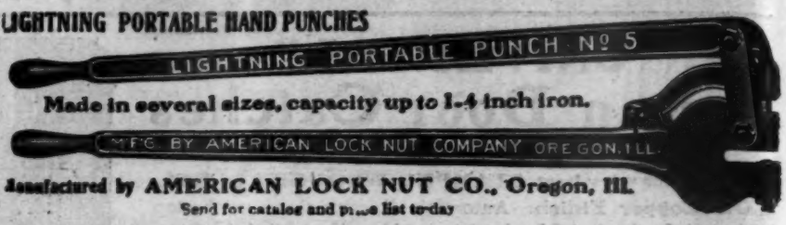
The only kick coming on us is that we did not fill orders promptly. We did not expect so heavy a demand. It was not our fault.

If you have tried to get this tool from your jobber and become discouraged because he was one who could not get his order for them, we now advise you that this condition has been overcome by our building a large country factory where they are being made by the thousands, and every order, whether sample or stock, is shipped promptly.

So, Try, Try Again!

DUBY & SHINN MFG. CO., Inc.
Branchport Station.
Home Office and Works, LONG BRANCH, N. J.

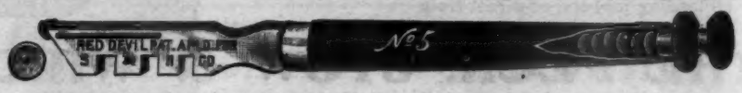
LIGHTNING PORTABLE HAND PUNCHES



Made in several sizes, capacity up to 1-4 inch iron.

Manufactured by AMERICAN LOCK NUT CO., Oregon, Ill.
Send for catalog and price list to-day

FIFTEEN MILLION

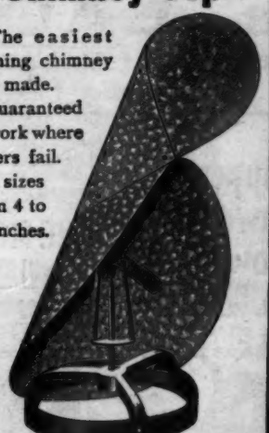


(15,000,000) satisfied Glaziers use the Genuine **"Red Devil"** Glaziers' Tools.
This is a new one.
It's worth it's weight in gold.
You buy **one** and you get **seven**, because there are **seven** wheels in reserve.
Ask your jobber for them, and if they won't give them to you, or want to substitute, write us direct.
Remember, it is the **Genuine "Red Devil" Glass Cutter.**

SMITH & HEMENWAY CO.
108-110 DUANE STREET, NEW YORK CITY

The Dayton Swing Chimney Top

The easiest turning chimney top made.
Guaranteed to work where others fail.
All sizes from 4 to 24 inches.



Manufactured by
The Kramer Bros. Fdry. Co.
DAYTON, OHIO
Largest Manufacturers of Swing Tops in the World

"Yankee" Tools

ARE THE NEWEST, CLEVEREST AND QUICKEST SELLING, and are without equal in quality or efficiency in practical use.

No. 10 and 11—Ratchet, Right and Left Hand and Rigid
No. 15—Rachet, With Finger Turn on Blade
No. 30 and 31—Spiral Ratchet, Right and Left Hand and Rigid
No. 40-41-44—Automatic Drill
No. 50—Reciprocating Drill for Wood or Metals

Send for "Yankee" Tool Book

North Bros. Mfg. Co., Philadelphia

Persistence in Advertising

In the expansion of business now bringing profit to so many manufacturers advertisers who have made themselves regularly prominent in the past five years have been notable in reaping the rewards of persistent publicity.

Goodell-Pratt Company
GREENFIELD, MASS., U. S. A.
Catalogue Free
HACK SAWS
FAMOUS FOR TEMPER AND CUT
HAND AND MACHINE BLADES OF ALL STANDARD LENGTHS AND WEIGHTS.

AKRON ECLIPSE LEVELS

All glasses in **Akron Eclipse Levels** are carried on elastic bearing and enclosed in heavy glass tubes and are almost unbreakable.

SEND FOR CATALOGUE ILLUSTRATED IN COLORS
The BAKER McMILLEN CO., Akron, Ohio, 13 Bowery St.

Cabinet Makers' Benches.

No. 1 BENCH.

We are the largest manufacturers of Benches in the World.

Write for catalog describing our complete line of Cabinet, Carvers, Pattern Makers and Manual Training Benches, Hand Screws, Cabinet Makers' Clamps, etc.

Grand Rapids Hand Screw Co.,
160 South Ionia Street, Grand Rapids, Mich.

When you sell Levels—Sell the right kind

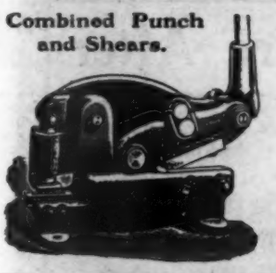
A Tool you can sell quickly, profitably and satisfactorily to Carpenters, Masons Machinists, and all who use Levels or Plumbs, is the

DAVIS & COOK LEVEL.

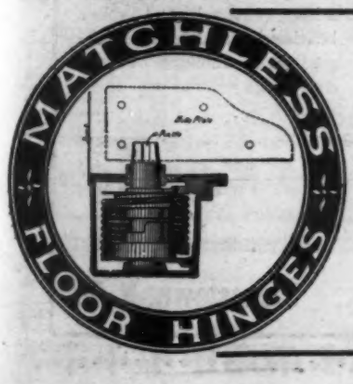
The different Level—with the bulb seen in all positions. Any mechanic will buy when he examines. Put in stock.
For sale by all the leading jobbers. Catalog on request.

DAVIS & COOK, 23 High Street, Watertown, N. Y.

Combined Punch and Shears.



Tools for Sheet Metals
INCLUDING
Tinners' and Roofers' Tools,
Shears, Punches, Presses and
Dies, Can-Making Machinery
MADE BY
NIAGARA MACHINE & TOOL WKS., Buffalo, N.Y.



The Sincerest Flattery for the "Matchless" is the imitations which are to be found in the market.
The Matchless double-acting floor spring hinge is ball bearing. This insures a minimum of friction. The matchless operates easy and without noise.
They can be fitted to any door in Bank, Church, Vestibule or Pantry,
Send for our fully illustrated catalog and price list. Address Dept. A,

LAWSON MFG. CO.,
40 Dearborn Street, Chicago.
101 Reade Street, New York.

H. WEISS & CO.
20 Cliff St., New York

Hand Punch for No. 10 Iron

Skylight Gearing and Chain Lifts

Tinsmiths' and Plumbers' Tools. Cornice Makers' Tools. Coppersmiths' Tools
Pipe Threading Machines

Second-Hand Goods Bought, Sold and Exchanged

STANDARD HORSE NAIL CO.
NEW BRIGHTON, PA., U.S.A.
MANUFACTURE
A Full Line of Horse Nails
Send for Catalogue, Prices & Samples.

WAGON JACKS and

POTATO PLANTERS
SEND FOR TERMS AND PRICES
J. R. STEITZ
CUDAHY, WISCONSIN

TREADLE SHEAR

This Treadle Gap Shear is made in all standard sizes for No. 14 and lighter gauge sheets. With it, sheets can be squared, trimmed or slit. We make a complete line of shears, punches and bending rolls, all sizes, for hand or belt drive.

BERTSCH & COMPANY
CAMBRIDGE, IND.

THE EASY Washing Machine

It Sells on Sight Stays Sold

Has the largest rubbing capacity and is the EASIEST RUNNING machine on the market.

Write at once for our Attractive, Exclusive Agency Offer.

Manufactured by

The
Easy Washing Machine Company
SAINT MARYS, OHIO

Reciprocating Motion

by means of Compound Levers, combined with time-tried and universally endorsed principles in Clothes Washing—High Speed Ball Bearing Fly-Wheel makes operating next door to

PERPETUAL MOTION

The "One Minute" Washer **washes cleaner** than any other machine.

The "One Minute" Washer we claim, without dispute, to be the **easiest running** machine on the American market.

The "One Minute" Washer does the work in **less time** than others.

Manufactured by

Hawkeye Incubator Company
Newton, Iowa

Indiana dealers address Hawkeye Incubator Co., Indianapolis, Ind., 520 S. Delaware St.
Minnesota and North Dakota dealers address Janney, Semple, Hill & Co., Minneapolis, Minn.
Nebraska and South Dakota dealers address Paxton & Gallagher Co., Omaha, Neb.

J. F. LEWIS, Cisco, Ill., *writes:*
I cannot get along without
THE AMERICAN ARTISAN.

The MAJESTIC WASHING MACHINE

Roller bearings. Large fly wheel. Lightest running Washer on the market. People are writing us daily to know where they can buy the Majestic. It is the quickest seller and commands the biggest profit to you of any Washing Machine made. That is why you should sell it. The tub of the **Majestic** is made of selected **Virginia White Cedar**, and will stand the action of water a life time. It is bound with our celebrated **Electric-Welded Wire Hoops**, is steam-tight and easy to operate. Two hundred thousand satisfied customers will testify to all we say.

We are shipping out 2500 Majestics each week. Write us for catalogue and prices.

Richmond Cedar Works
Manufacturers of Wooden Ware
Richmond, Virginia.

THE

WHITE ROSE

IS WITHOUT A COMPETITOR

It is actually BALL BEARING and has proved the most phenomenal seller ever placed upon the market.

Write Today for EXCLUSIVE AGENCY

WHITE LILY WASHER CO., TOLEDO, OHIO DAVENPORT, IOWA

The Dollars You're After

will come to you with less effort the moment you invest a few of them in a trial order for the

IMPERIAL ROTARY WASHER

It's noiselessness—easy operation (has all-steel roller bearings)—handsome finish—gold and aluminum bronze castings—help sell it so quickly.

When you write for prices ask for our catalogue. It shows the most complete line of washers on the market.

Established 1871.

THE BLACKSTONE MFG. CO., Jamestown, N. Y.

WASHING MACHINES THAT WILL SELL—SALABLE

WE are the largest manufacturers of family Washing machines, having by far the largest capacity of any in existence. Not alone that but we have **Fifteen different styles** of the most **perfect, up-to-date** washers ever offered to the trade.

If You Are a Wide-Awake Dealer

and

WANT TO MAKE MONEY Sell Our Washers WRITE US TO-DAY for Particulars.

H. F. BRAMMER MFG. CO.

DAVENPORT, IOWA

Eagle Mop Wringers and Ohio Detachable Mop Heads and Handles

Meet every service demanded of them. WHY?
Because they are built upon the correct principles. They have been hailed with delight by users, and the universal verdict is, I WANT NO OTHER. Ask your jobber or write us direct. A catalogue for the asking.

Eagle Cooperage Works, Sole Mfrs., **Circleville, O.**

BUCKEYE CARRIAGE PAINT

Ground in Fine Coach Varnish of Our Own Manufacture!

Dries quickly with a handsome gloss and durable finish.
It looks better, goes farther and lasts longer than any Paint on the market.

Unquestionably the Best Paint Manufactured

MANUFACTURED BY
BUCKEYE PAINT & VARNISH CO.
TOLEDO, OHIO

The Curtis Hardware Co., Paonia, Colo., write:

"Kindly take out our advertisement for man as we have about 25 applications."

GUARANTEED

Not simply a high sounding but meaningless string of words, neither an empty guarantee to give satisfaction, but a definite, absolute, binding guarantee that this paint will

WEAR FIVE YEARS

or paint for repainting is yours without charge.

That is the kind of guarantee we put on Pitkin's Barn Paint and it lives up to it too.

GEO. W. PITKIN CO.

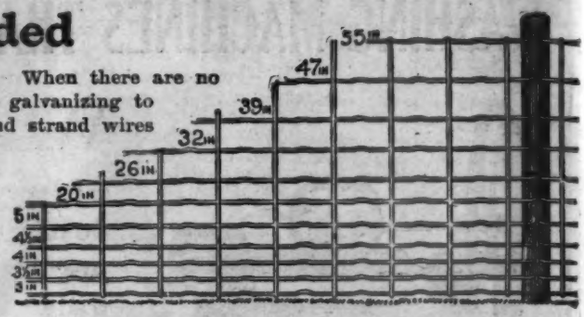
Paint and Color Makers

Established 1868 CHICAGO, U.S.A. Originators of Barn Paint

"Pittsburgh Perfect" Fences

Electrically Welded

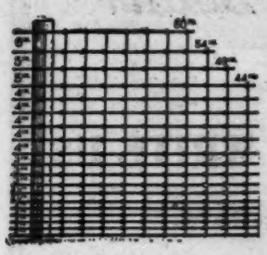
When the joints are electrically welded there are no wraps. When there are no wraps there is no chance for moisture to accumulate, for the galvanizing to crack, for the wire to be rusted. Stays cannot slip; stay and strand wires become one piece when the union is made. These fences



WILL LAST LONGER THAN ANY ON THE MARKET

WRITE FOR CATALOG

Pittsburgh Steel Co., Pittsburgh, Pa.



THE DENNING FENCE

Is the fence that pleases your customer. It is made on scientific and practical principals. It is made in various sizes, weights and meshes, for stock, hogs, poultry and rabbits. We can also sell you Lawn and Cemetery Fencing, Gates, Barb Wire, Nails, Staples, Portable Corn Cribs and Grain Bins.

WRITE FOR CATALOGUE AND PRICES

THE DENNING WIRE & FENCE CO., Cedar Rapids, Iowa

Make More Money

Rural Routes are going in all around you. New boxes are needed on old routes. You should get this business. You *can* get it with

Bates-Hawley Patent **SIGNAL MAIL BOX**

It is the original box for Rural Routes with special endorsements of Postmaster General. The best made, the best liked, the best advertised and the easiest sold.

SIGNAL MAIL BOX CO.
106, Benton St., JOLIET, ILLINOIS.

ELEVATORS

IMPROVED QUICK AND EASY RISING STEAM, ELECTRIC AND HAND POWER

SEND FOR CIRCULARS

KIMBALL BROS. CO.
1031 Ninth St., COUNCIL BLUFFS, IOWA
Kimball Elevator Co., 139 Vincent St., Cleveland, O.

INTERCHANGEABLE
LOCK-CORNER SHELF BOXES
For the Hardware Trade.
THE A. H. GREEN CO.,
97-101 Warren St., NEW YORK.

Where Successful business men have advertised is pretty safe to advertise.

Blick No. 3 The Best Box

FOR RURAL FREE DELIVERY

$5.88 Per Dozen

BE JUST WITH CUSTOMERS

Sell them Blick No. 3 boxes. They are big ones, 6½x8½x 19 inches. Made of heavy galvanized steel. Painted green, the new Government color. Same shape and color as city boxes. Have Positive-Locking Flag Signal, Automatic Latch, Water-Tight Quality. Every box tested, every box right, every box warranted. They will get the business. You better get them. Order now.

$5.88 per Doz.

BLICK-WILLIAMS CO.
INDIANAPOLIS, IND.

SUCCESS

STEEL ICE CHESTS

Fill a long felt want on the market for a small and medium sized Ice Chest which is perfectly sanitary and in which food can be kept in warm weather at a small cost. It is constructed entirely of galvanized steel double throughout with air-tight air space all around sides, bottom and cover. Made in five sizes Smallest size suitable for automobiles boats and nurseries. Quick seller and money maker. Send for circular and prices.

SUCCESS MFG. CO.
GLOUCESTER, MASS.

Make Money—Sell the Security Lightning Rod

It always was the best on the market.
It is the best on the market.
It always will be the best on the market.
Better get in line—Send in your orders NOW—First come, First Served.

President Johnson introduced George P. Griffin of Albion, Mich., a representative of the Michigan Retail Hardware Dealers' Association.

The following talk which was delivered by Mr. Griffin at the 13th Annual Convention of the Ohio Hardware Association at Columbus, Ohio, was based on the Security Lightning Rod.

I hardly know what to speak about, but there is only one thing upon my mind at this time and that is the subject of profits, and I presume that never in the history of the retail hardware business—I know in my own case—in sixteen years that I have been connected with the hardware business, have the conditions been as they are to-day. Well, the hardware people as a rule are looked upon as the representative business men of this country. I hardly believe that there are any class of dealers who are so slow to take advantage of a rising market as the hardware dealer. I know in our state that they seldom raise the retail price until we have sold out the stuff that we buy cheap.

Now, there is a condition that presents itself, gentlemen, before the retail hardware people to-day, that we should take hold of, and that is the lightning rod business. A year ago I attended a meeting of a telephone company in a little town twelve miles from my city. I had one of the telephones in my store. I attended the meeting principally to get acquainted with the farmers, and I went in a store in the town of a friend of mine and saw some lightning rods. I says, "Well, what are you selling?" He says, "Lightning rods," and I gave him the laugh. Well, I came home and went to the Michigan Association meeting in August and found there dozens of hardware people who were selling lightning rods and making money, and I found out since on investigation that one firm in a town had cleaned up net $6,100.00 in the lightning rod business.

Gentlemen, you can get good lightning rods that will absolutely protect the farmers' buildings, and you are more fortunate in Ohio than in any other state from the fact that a building properly protected with lightning rods, the old line companies will give you better rates. We investigated the lightning rod business and commenced to sell them on the 11th day of January. I looked around and found lightning rods that I thought was good and I bought one thousand feet. After I bought it I found that my competitor in a town near me had the same thing and was selling it at such a price that there was practically no margin in it. Then I bought another one that was better, and found the same thing—that it was being sold in a town eighteen miles away. Then I investigated another one and got a county on it—got the western half of Jackson County and the eastern half of Calhoun, and I started out and divided that county among the farmers—got a farmer to canvass for me. Since the 11th day of January my profits have amounted to a substantial sum.

Now, the secret of the lightning rod business is to get one on which you have the absolute control of the territory. In the state of Indiana as my friend Corey here will bear me out, they are all taking hold of it. In the state of Michigan the hardware dealers **will clean up $150,000.00** this year in the **lightning rod business.**

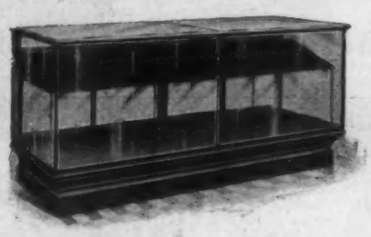
As a member of the executive committee of the Michigan Retail Hardware Association I extend to you a most hearty invitation to attend our convention in August, and if you come up there, gentlemen, I assure you that we will give you one of the best times in your life. Now, if you desire any information in regard to lightning rods, I might be able to enlighten you. I will be glad to meet you at the exhibit building.

Security Lightning Rod Co., Burlington, Wis.

LIGHTNING RODS

MANUFACTURERS OF
Copper and Galvanized Steel Section, and Copper Cable Rods, 28, 30 and 49 wire. Glass Balls, Weather Vanes of every description.
Static Demonstrating Machines.
ATTRACTIVE PROPOSITION FOR DEALERS

PROMPT SERVICE



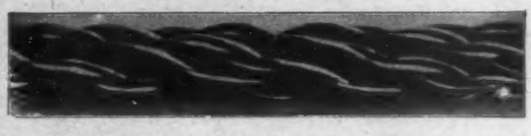
Our New Cutlery Display Case No. 98

We carry at all times nearly 1000 cases in stock. All sizes, all styles.

Write for our Catalog "H."

Grand Rapids Show Case Co.
GRAND RAPIDS, MICH.
New Office, 714 Broadway, New York City
(Under our own management.)
Same Floors as McKenna Bros. Brass Co.

The Largest Show Case Plant in the World



MAHER & SON LIGHTNING ROD CO. is the only firm that makes a 32 wire cable. Arrow Vanes made of Pure Cast Aluminum; Horse, Cow and Rooster Vanes made of Pure Zinc instead of tin and 34 ins. long, pure copper bayonet points. Giving $500.00 guarantee.

We have the finest static machine now, something new and given to our agents FREE. Write to-day for Agency and territory. Our prices are right.

MAHER & SON LIGHTNING ROD CO., :: PRESTON, IA.

PULLMAN
SASH BALANCES

Are you selling them?

IN USE EVERY-WHERE

Send us your orders

PULLMAN MFG. COMPANY
ROCHESTER, N. Y., U. S. A.

We have a Hardware Delivery Wagon that you can Depend Upon.

Body 20 in. from the ground; full width; regular heighth wheels, and yet will turn short.

Easy to Load and Unload.

Durability guaranteed.
Complete catalogue on request.
Mention this paper and address in full.

SYCAMORE WAGON WORKS
109 Edwards Street **SYCAMORE, ILL.**

AGATE NICKEL-STEEL WARE

AGATE L&G Mfg. Co. NICKEL-STEEL-WARE

Is absolutely free from poisonous substance, is made by careful, experienced men, by a company founded in 1850. The first enameled ware and blue and white ware made in this country was made in our mills. We know how to make enameled ware safe and durable. We make it safe and durable because we are proud of the trade mark. Look for the blue label.

Lalance & Grosjean Mfg. Co.

CHICAGO, NEW YORK BOSTON

Wheeling Galvanized Ware. Ash cans, Garbage Cans, Refrigerator Pans

MANUFACTURED BY
WHEELING CORRUGATING COMPANY:
Wheeling, West Virginia.
WE CARRY FULL STOCK IN ALL OUR WAREHOUSES.
Let Us Quote You Our Prices

BRANCH OFFICES AND WAREHOUSES:

NEW YORK CITY	47-51 Cliff Street
CHICAGO	23-27 North Clinton Street
ST. LOUIS	112-114-116 South Eighth Street
PHILADELPHIA	402-404-406 Race Street
BOSTON, MASS.	133 and 134 Pearl Street
CHATTANOOGA, TENN.	King Street

The LISK Sanitary

Self-Basting Enamel Roaster

Is the most wonderful cooking utensil and the best and most profitable seller ever placed upon the market.

¶ An extensive advertising campaign, embracing the use of all the best magazines read by over five million people, has awakened a wide public interest in the roaster.

¶ It is a guaranteed money-maker and labor saver.

¶ Seamless, sanitary, self-basting.

¶ It is manufactured in four sizes from Lisk's celebrated Imperial gray enamel steel ware and is unconditionally guaranteed.

¶ If you do not handle it, send for booklet and prices.

THE LISK MFG. CO., Ltd

Canandaigua, N. Y.

"Uncle Obediah sold more lanterns *last month* for us than he ever sold before even in September or any one month in the year."

That is the report from most every dealer who has had one of these life-size cut-outs in his window.

Ask your jobber how to get one or write direct.

The Uncle Obediah Prize Contest Closes May 31st.

The PRITCHARD-STRONG COMPANY

25 Circle St., Rochester, N. Y.

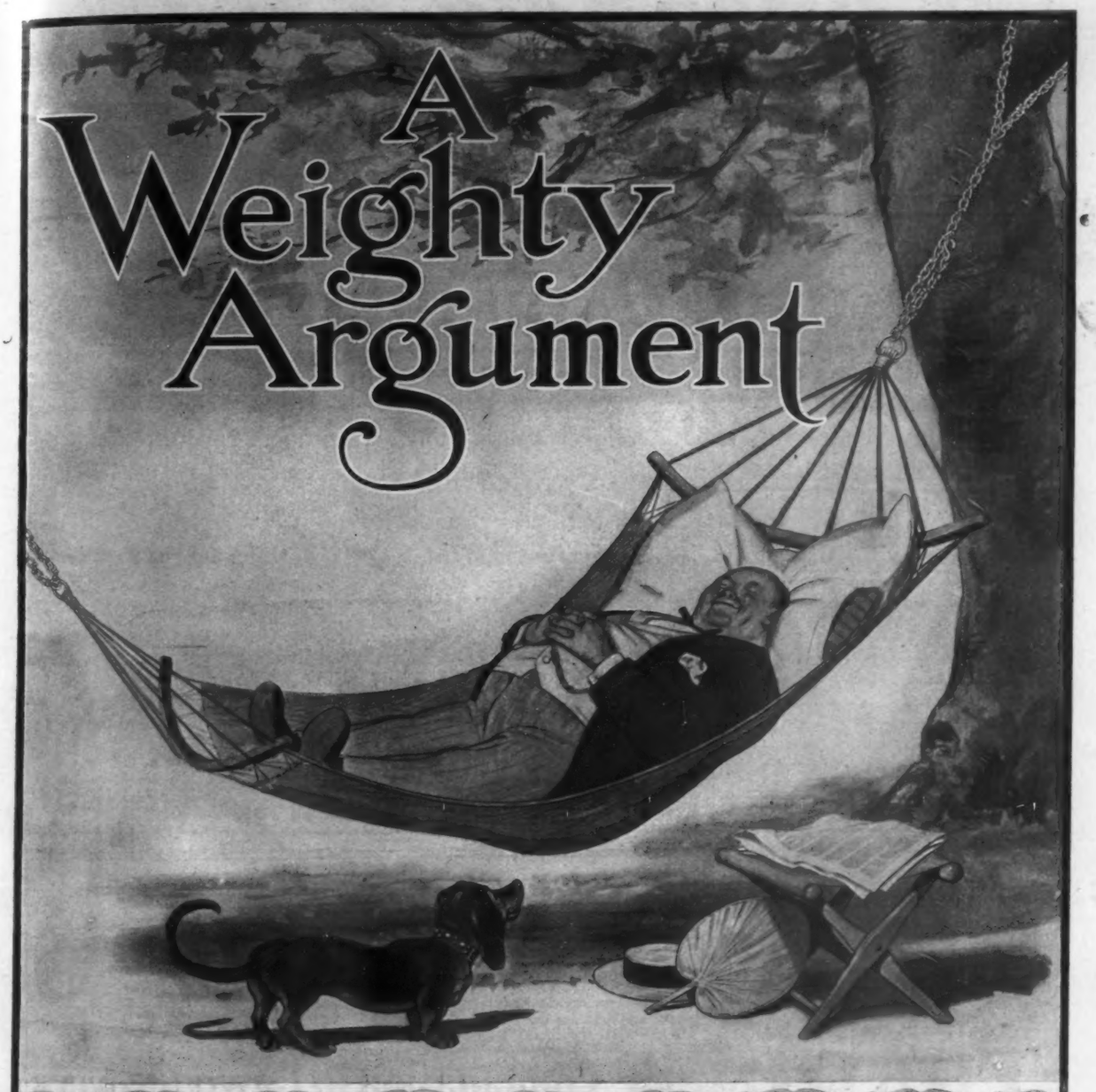
Don't wait for people to ask you for seasonable things before you order them—**things that you ought to be showing.** Lead the demand, don't follow it.

SHOW YOUR ENTERPRISE

JUST NOW show the Enterprise Fruit, Wine and Jelly Press and Enterprise Cherry Stoner. The demand will be great, and the dealer with the most "Enterprise" will capture the most cash. Order from jobbers. Write us for complete catalogue and advertising matter for store use.

The Enterprise Manufacturing Co. of Pa.
PHILADELPHIA, U. S. A.

10 Warren St., New York City 438 Market St., San Francisco, Cal.



FOR HAMMOCK
CHAINS

ONEIDA GALVANIZED "HAMMOCK CHAINS" are infinitely stronger than rope. Tested to hold 1,500 pounds. Heavily galvanized; therefore rust-proof. Most easily adjusted. It will not slip. Made in three sizes: 3 ft., 6 , and 9 ft. respectively. Attractively packed one set to a box. A convenient shelf package. Will appeal to every householder.

Be sure you have these chains in stock before the season opens.

DISPLAY HANGERS FURNISHED FREE

ONEIDA COMMUNITY, LTD., ONEIDA, N. Y.

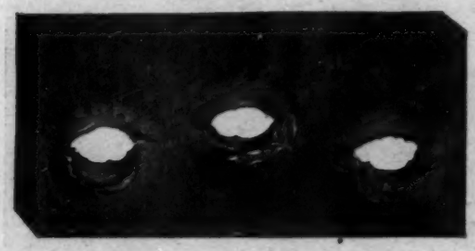
MAY 6 1907.

Remington

AUTOLOADING RIFLE

The new, 5-shot, repeating hunting Rifle which *loads itself*, and is "big enough for the biggest game." Calibre .35 Remington; velocity *2000 feet*; weight of bullet, 200 grains. It strikes with the force of a mighty hammer, nearly a ton in weight, and penetrates machine steel 5/16" thick, as shown below. Solid breech, safe-locking system, light trigger pull and loads with clip. Every luxury with rapid-fire, knockdown execution.

It Is the Modern Big Game Rifle. **Sportsmen Want It.** **Order for the Fall Trade.**



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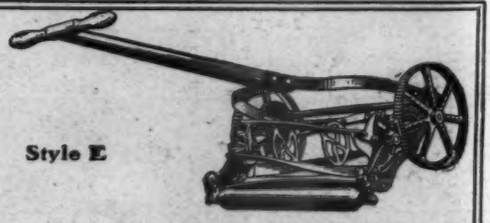

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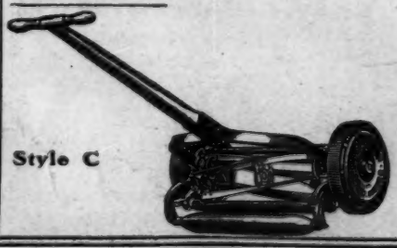

Style C

Style K

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Following close upon the annual meeting of the Indoor .22 Cal. League at Rochester, N. Y., Jan. 29-Feb. 2, 1907, where Peters Cartridges won the **CHAMPIONSHIP** of the U. S. for the **TENTH CONSECUTIVE YEAR**, the Zettler Tournament, New York City, March 10-16, resulted as usual in decisive victories for this ammunition.

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The score made at Grand Rapids in Feb'y, 1906, by W. A. Tewes, winning the Championship **2481 OUT OF 2500** remains the **WORLD'S RECORD**, testifying to the oft-proven superiority of Peters Cartridges.

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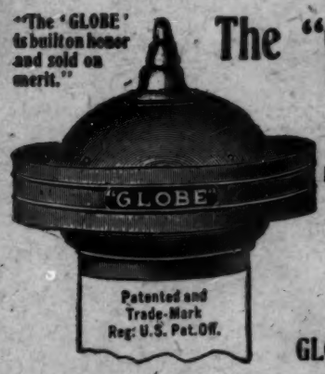

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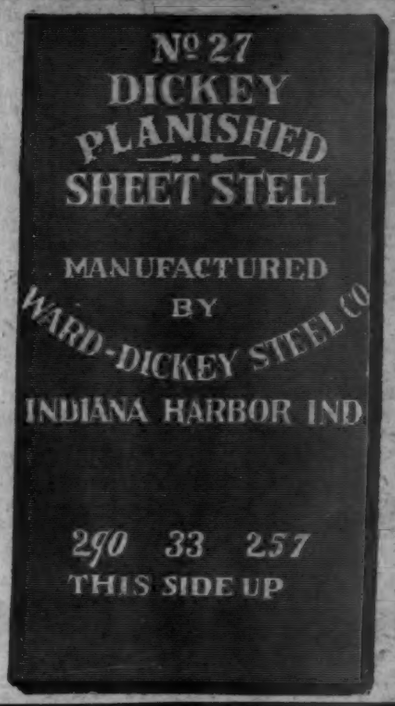

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